# WHAT IS EXECUTIVE FUNCTIONING? HERE'S WHAT YOU NEED TO KNOW

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Parents are often looking for tips for how to help their child or children be more focused and organized with their school work. Parents also seek advice on how to help their child and children better manage their emotions and prevent meltdowns. These are examples of executive functioning skills, a hot topic among parents and tutoring companies!



Explicitly learning how to maximize one's executive functioning skills is crucial for a child's success in school and later in adulthood.

#### WHAT IS EXECUTIVE FUNCTIONING?

According to the Harvard University Center on the Developing Child, executive functioning refers to the skills and mental processes that allow individuals to plan and execute tasks, focus attention, and follow and remember instructions within the context of achieving a goal. In other words, executive functioning acts as our brain's management system, and it plays an important role in our behavior and in learning across the ages.

Executive functioning involves three major types of brain functions or core skills. **These are:** 



#### WORKING MEMORY

is the ability to hold and process information over short periods of time. It can also include drawing from past learning experiences and applying them to current or future projects and situations. It allows an individual to hold information while actively processing information without losing track of a simultaneous task.



#### MENTAL OR COGNITIVE FLEXIBILITY

which enables an individual to adapt to changing conditions, respond to different demands, and analyze situations in several ways. This plays a crucial role in solving problems, whether in school or daily life.



#### **INHIBITION OR SELF-CONTROL**

allows an individual to set priorities and curb impulsive behavior.



In their book, Smart But Scattered Kids, Dr. Peg Dawson and Dr. Richard Guare further expand these skills. Aside from the three main areas of executive functioning mentioned above, Dr. Dawson and Dr. Guare also include the following :

**Emotional Control** — the ability to manage emotions while finishing a task or goal; controlling and directing behavior.

Sustained Attention — the ability to focus and complete tasks, despite fatigue or boredom.

**Response Inhibition** — thinking before acting; ability to assess and evaluate a situation before responding to it. **Task Initiation** — starting projects without procrastination.

Planning and Prioritization — making decisions and mapping out plans towards achieving a goal or completing a task while identifying irrelevant information.

Organization — creating and maintaining a system that helps keep track of

information, materials, personal possessions.

**Time Management** — estimating and allocating time needed to complete a task or meet deadlines.

**Goal-Directed Persistence** — the ability to not lose sight of a goal and visualize it to the end without getting swayed by distractions or competing interests.

Flexibility – adapting to obstacles, new information, or changing situations.

Metacognition — the ability to step back to assess and observe oneself in situations; involves self-monitoring and self-evaluative skills.

While children are not born with these skills, they develop them from infancy and strengthen them over time. Like other learned skills, such as language, children can learn executive functioning skills.



## WHAT ARE THE SIGNS OF EXECUTIVE DYSFUNCTION?

In an interview with Dr. Lisa Jacobson, head of the Executive **Function Clinic at** Kennedy Krieger Institute, she defines executive dysfunction as "difficulty in getting the job done" and regulating behavior. Individuals with executive dysfunction will often have trouble planning, organization, time management, and solving problems.

Without well-developed executive functioning skills, a child struggles with organization and managing behavior. This can, later on, affect their ability to set and accomplish long-term goals.

So what are the signs to look for if you suspect your child is struggling with executive functioning? Here are some of them, as listed in the Executive Function 101 ebook by The National Center for Learning Disabilities :

- Easily distracted and requires plenty of reminders or prompts to stay on task
- Struggles with setting goals
- Has trouble identifying a starting point in tasks and often procrastinates
- Struggles to understand the amount of time required to complete a task or project
- Has difficulty focusing on both details and the big picture
- Takes longer than peers to finish tasks or homework
- Has problem checking and assessing their work
- Has trouble following multi-step directions

Additionally, it is important to note that executive dysfunction is not a diagnosis nor a learning disability. However, it is one of the hallmarks of Attention Deficit Hyperactivity Disorder or ADHD. Specifically, most of the symptoms of executive dysfunction are similar to the inattentive subtype of ADHD. And like ADHD, issues with executive functioning are part of the brain's physiology and cannot be "fixed." They can, however, be improved and managed.



## WHAT CAUSES EXECUTIVE DYSFUNCTION?

The jury is still out as to what exactly causes executive dysfunction, but some studies suggest it may be hereditary. A child with weak executive functioning skills is likely to have a parent with the same problem.

A study also revealed that executive dysfunction could result from diseases, disorders, and injuries affecting and damaging the prefrontal cortex.

Differences in brain development are also another factor, as found by researchers who have studied the causes of executive dysfunction and ADHD. Results show that the brain's areas responsible for working memory and emotional control develop more slowly in people who have trouble with executive functioning skills.



### WHAT IS THE LINK BETWEEN EXECUTIVE **FUNCTIONING AND** LANGUAGE?

**Executive functioning** plays an essential role in language development and reading. Working memory and flexibility, for example, are crucial to improving a child's reading comprehension skills.

This article further explains how various executive functioning skills affect other aspects of literacy, which include :

- Letter recognition
- Decoding or sounding out words
  Words with multiple meanings (vocabulary)
  Passive voice (understanding more complex
- grammar)
- Focus while engaged in literacy



The same connection is true when it comes to the early years of speech and language development. For starters, research shows that a caregiving environment is a must for executive functioning skills and early language development. The following findings further support this connection:



 Joint attention skills (sharing attention with others by showing, pointing, and coordinated looking between object and people) are crucial for language development (Kasari et al., 2006)

• Preschool children use metacognitive strategies (working memory, planning), cognitive flexibility, and inhibitory control for storytelling and expressive language (Trainor, 2010). Children at this age also rely on "self-talk" for problem-solving tasks

• Executive functioning skills are crucial for tasks involving verbal reasoning, making inferences, and discourse.

• Metalinguistic awareness, or the ability to reflect on language, requires executive functioning skills and facilitates language development in children (Morgan, 2015).



### HOW TO BOOST EXECUTIVE FUNCTIONING SKILLS

Struggling with executive functioning can significantly impact a child during their early years and later in life. Here are some steps you can take to help improve your child's executive functioning :

- Explicitly teach the skill and motivate your child with positive statements. Teaching children to push themselves with positive self-talk will help them get through the steps to achieve their goals.
- Respect the child's developmental status. Be mindful of expectations and look for ways to help them learn continually.
- Set up routines and systems to boost organizational skills.
- Use pictures, charts, sticky notes, and other visual or tactile cues to help manage schedules and tasks.
- Start a daily report card or rewards system to keep track of goals and encourage accomplishing tasks.
- Use clocks, counters, or timers to address "time blindness" and help them understand the concept of time (how much time has passed, is left, and how quickly it is passing).
- Seek the help of an executive functioning coach or tutor to help your child improve organization, time management, and studying skills.

Providing your child with the best support systems to improve executive functioning skills starts with finding the right professionals with a custom approach to coaching and tutoring.

