

Understanding the Eight Pillars of Executive Control

Adam J. Cox, Ph.D.

Imagine, for just a few minutes, that you had never heard the term ADHD. Imagine that you had a new lens through which to see the specific thinking and self-control challenges faced by children diagnosed with ADHD. Finally, imagine that this lens suggested all kinds of behavioral interventions that could be applied by any concerned adult - parent, teacher, counselor, etc. For the first time, we would have an understanding of children's thinking that spurs helping strategies, beyond medication, for specific cognitive deficits.

As a psychologist specializing in neurodevelopmental disorders, I began to see that many of the problems seen in childhood, whether at home or school, have a common denominator – impairment in executive control. I know the term sounds mechanistic, but its implications are incredibly human. I became so passionate about introducing this topic to the people who can make the most difference – parents and teachers – I was compelled to write a book on the topic. It's called:

No Mind Left Behind: Why Executive Control Skills Are Essential for Every Child - and How Parents and Educators Can Sharpen Them. Perigee (Penguin Book Group) Fall, 2007.

In this brief article, I want to introduce you to what I call the Eight Pillars of Executive Control:

- **Initiation** – being able to organize one's thoughts well enough to get started on a particular task without having to be asked multiple times.
- **Flexibility** – involves learning to adapt by shifting one's focus and pace as various situations unfold. Imagine how difficult it would be to drive your car if it wouldn't turn and only went one speed. (About as difficult as parenting a child with only one speed and one direction!)
- **Attention** - focusing long enough and accurately enough to learn important information. By extension, attention also involves the ability to block distraction. A well orchestrated "executive brain" knows its priorities.
- **Organization** – is about managing space. It's also about taking the emotional impact of chaos seriously. Why? Because chronic disorganization undermines forward momentum – a sense of accomplishment.
- **Planning** – is about managing time, and is more important than any other executive pillar when it comes to finishing things on schedule. A planning mind uses time as a tool to clarify priorities and enhance productivity; indispensable skills to 21st century success, beginning with school and, eventually, careers.
- **Working memory** – is the ability to retain information long enough for it to be stored in long-term memory. Our society has a word for this process – learning. Of all the executive controls, working memory is the most pervasive, contributing to the smooth operation of every pillar. (Working memory is the rocket fuel of the modern mind.)
- **Self-awareness** – pertains to having both sufficient self-knowledge and an ability to perceive how others see you. This information is essential to making purposeful choices about how to act in situations where one wants to avoid unintended consequences that lead to isolation or ostracism.
- **Regulating emotions** – means expressing one's feelings in proportion to the events that elicited them. When a child under or over-reacts, she is out-of-sync with people or particular events. Socially, people tend to ignore a silent recluse, and run away from an "erupting volcano."

Among the many contributions of executive control is the ability to focus, plan, and act in a goal-directed manner. Working in concert, the eight pillars enable us to look into the future, identify a goal, coordinate a sequence of steps, and initiate action to achieve a goal. Talk about valuable! How many times have you needed to use goal-directing action this week, this day, even this hour?

Before you assume that executive control is only about being efficient and productive, let me suggest that our relatively massive executive brains are a big part of what makes us human. Consider the fact that a person's frontal lobes make up one-third of their whole outer-brain (cortex), compared with a cat, whose frontal lobes make up less than 3 percent of its cortex. Cats may have wonderful instincts, but we've got executive control working for us big time. Over the course of aging, cats may get better at finding a quiet place to nap, while we get better at applying initiative, focus, memory and self-control. In essence, we develop the ability to regulate our thoughts and emotions and, ideally, to orchestrate them so they make beautiful music. If we can, others will love to hear us play, to be around us, to be our friends, to make us a part of their world.

The eight pillars of executive control also help a child grasp a sense of time and place by connecting past experiences with what might happen in the future. This continuity in a child's consciousness contributes to building identity – "who am I?," "what do I know?," "how am I unique?." Having this level of self-awareness is precisely how children learn to orchestrate their own behavior more consciously. When I meet with a child who is impulsive, acting in a haphazard, self-defeating manner, I know he hasn't yet learned how to connect the past to the present to benefit from his own experiences. This type of problem goes way beyond time

management. It relates to knowing your own history; how your collective experiences shape your insight, choices, and beliefs about your self.

In *No Mind Left Behind*, I provide dozens of suggestions for building the eight pillars of a child's executive brain. The presentation I give by the same name also identifies numerous strategies to strengthen each pillar of the executive brain. I will be talking more about these strategies in forthcoming issues of my free newsletter *Family Matters*. I will also continue to add articles to my website pertaining to the individual pillars. My goal is not to undermine the diagnosis of ADHD, but to expand our understanding of this syndrome with respect to the critical skills of developing minds. Executive control opens new doors to understanding and improving all aspects of a child's capability.