

EXECUTIVE FUNCTIONING: MIDDLE SCHOOL, HIGH SCHOOL, AND BEYOND

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For children with any sort of learning or developmental challenge, the transitions from elementary school to middle school, from middle school to high school, and from high school to college and the vocational world often represent unique challenges. Why? Often, the answer may be found in relation to the concept of executive functioning. Growing demands for organization, planning and self-direction may serve to make transitions which are stressful for most adolescents particularly tumultuous for students with challenges in this area of development.

Executive Functioning

Executive functioning is a broad term referring to “higher level”, brain-based skills. Think about the functions that an executive serves in a company, that a conductor serves in an orchestra, or that a manager serves on a baseball team. These people have many jobs...they have regulatory functions, deciding what should and should not happen, and when things should be done. They have planning functions, looking into the future and figuring out how to get from “point A” to “point B”. They need to organize everything happening around them. One thing they all have in common: they have to keep many balls in the air at once.

Metaphorically, our brains are like a company, an orchestra, or a baseball team. There are many things happening all at once: sensory information is incoming, movements are outgoing, language needs to be processed and generated, emotions need to be interpreted and managed, and memories need to be retrieved from a mental “file cabinet”. There are many things going on in the world around us as well; we need to direct our attention to the most important ones.

At a very young age, we have little in the way of an internal executive, conductor, or manager. That is why pre-schoolers have so many of the characteristics that they do...they are subject to distraction from the environment and to disruption by their own emotions. They have limited ability to plan for the future or to organize their environments.

Executive functioning develops as the frontal lobes of the brain develop. These are the latest developing and the longest developing parts of the brain. They are not fully mature until young adulthood.

Executive Functioning Disorder

Executive functioning disorder is another broad term. In general, it refers to learning and/or behavioral challenges emerging from developmental delays in executive functioning, or to executive functioning deficits which result from neurological disease or injury.

Because not all areas of executive functioning will necessarily be delayed, there are many different variants of executive functioning disorder. When a child or adolescent particularly struggles with focus of attention and/or control of behavior, a diagnosis of ADHD may be applicable. Many children, however, will not meet criteria for ADHD but will have significant executive functioning challenges.

Self-regulatory challenges are often apparent in early childhood (e.g., in preschool). Children may be impulsive, and may also exhibit poor emotional control. Challenges in attention are more likely to become obvious in the early elementary school years, as demands for focus on tabletop activities increases. Finally, difficulties in planning and organization may emerge as the child reaches the later part of elementary school and transitions to middle school, and is faced with challenges for independent work, longer writing assignments, and projects.

Assessment of executive functioning generally involves a combination of neuropsychological tests and questionnaires which are completed by parents, teachers, and sometimes by the child. Behaviors suggestive of executive dysfunction are not always obvious in the testing setting because of the high level of structure.

Challenges in executive functioning are part of many different disorders of childhood: ADHD, learning disabilities, Asperger's Syndrome and autism, and psychiatric disorders. They are also a feature of many different kinds of neurological disorder. Finally, executive functioning problems may exist as "free standing" features of a child's developmental profile, without a broader neuropsychological disorder.

If a child meets criteria for ADHD and is struggling with symptoms of inattention and/or impulsivity then medication may be helpful. In general, however, whether or not medication is used children will also need supports in developing skills to compensate for challenges in executive functioning.

Children with challenges in executive functioning may struggle with many different aspects of home and academic life. It is worth emphasizing that, in most cases, a critical component of support will be the use of a good writing program. For children with executive dysfunction, writing programs need to emphasize a very structured approach to prewriting that teaches children how to effectively integrate material. Other educational supports will focus on organization of time and of materials. In some cases in which executive functioning problems are severe, tutorial support will not be sufficient and children will need to participate in educational programming in which organizational supports are integrated into instruction.