EXECUTIVE FUNCTIONING and NF1

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What is Executive Functioning?

EF refers to a person’s ability to manage daily routines, set and meet goals, and control emotions.
Studies have shown a high percentage (81%) of children with NF1 having moderate to severe impairment in cognitive functioning.

Despite varying profiles of cognitive deficit, findings are relatively consistent with regard to the comorbidity of NF1 and EF difficulties.

Additionally, children with NF1 have a higher risk of ADHD and children with ADHD have a higher risk of EF deficits.
For a Student...

As the demands of the academic environment increase each year, students are expected to incorporate information taught in class with information gathered from reading outside of class, to meet deadlines for assignments, to establish structure for written documents, and to manage materials. A student with an executive functioning deficit may not follow through on tasks/papers/projects; he may be described by his parents and by his teachers as “not meeting his potential.” This is the student who has difficulty planning and breaking down long-term assignments into smaller pieces; is unable to differentiate well-learned from less well-learned material; and is inaccurate at predicting how he will perform on a test. This student may try to fulfill the clerical and homework demands of his teachers, but he may fail to reach the level of performance that his parents and teachers expect of him.
Skills Involved in EF

- Initiating
- Planning
- Decision-making
- Error correcting/editing
- Transitioning and switching between tasks
Skills continued

- Organizing and ordering actions
- Managing time
- Using working memory
- Self-monitoring
- Exercising mental flexibility
Warning Signs of EF Deficits

- Keeping room, desk, locker, backpack, etc. organized
- Developing a system or routine for activities
- Following routines once they are established
- Planning an approach to various tasks
- Procrastinating
- Following through to task completion
Warning Signs continued

- Completing work on time
- Estimating the amount of time tasks will take
- Remembering necessary materials
- Remembering to turn work in
- Keeping track of materials, homework assignments, permission slips, etc.
- Catching/correcting mistakes
Warning Signs continued

- Following directions
- Controlling emotional reactions
- Maintaining attention
- Controlling impulsively
- Controlling hyperactively
- Adapting to changes to schedules, plans, etc.
Warning Signs continued

- Performing tasks involving working memory (i.e., mental math)
- Persisting when challenged
- Resisting the urge to shut down
How to Help

- Identify and track problem areas
- Work on targeted behaviors
- Allow child to brainstorm solutions
- Focus on the positive behavior, not the negative
- Model the desired behavior
- Explain and demonstrate the benefit to the child
How to Help continued

- Assess child’s meta-cognitive processes
- Model meta-cognitive processes (self-talk)
- Use positive reinforcement
- Revise strategies as needed
- Listen!
- Seek help from clinical psychologist/executive functioning coach
QUESTIONS?
THOUGHTS?

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