

What are Executive Functions?



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Executive functioning is a buzzword in the therapy world, but what are executive functions? Many sources break them down differently, but the most common domains are inhibition; working memory; cognitive flexibility/shifting; planning and organization; and self-regulation/monitoring (Obermeyer & Toglia, 2011). Let's break those each down to see how they impact a child's daily interactions.

- **Inhibition**- The ability to resist acting without thinking (Dawson & Guare, 2010). Deficits in this area can be seen in actions (taking something from someone else) and words (saying the first thing that comes to mind). This impacts a child's social relationships as well as ability to tune out distractions when working on a task.
- **Working Memory**- The ability to hold, update, and manipulate information in one's mind. Considered the foundation of a wide range of cognitive processes, including planning, learning, problem solving, reasoning, and comprehension (Obermeyer & Toglia, 2011). This can impact a child's ability to use information during the tasks they are completing. Deficits could be seen when a child is asked to do a chore and forgets what they were doing while walking to the room.
- **Cognitive Flexibility/Shifting**- The ability to change plans or actions because of obstacles, new information, or mistakes (Dawson & Guare, 2010). Troubles in this area are seen with children who get "stuck" on what was supposed to happen or on rules.
- **Planning and Organization**- Planning is the ability to make and execute plans based on pre-set goals and organization is the ability to identify and arrange/rearrange critical details/steps/groups of information to follow a plan and execute tasks (Katz & Toglia, 2018). Deficits in this area are often noticed during school participation, such as multi-step projects and bringing all the materials needed home for homework.
- **Self-Regulation and Monitoring**- The ability to control emotions/behaviors/actions so that goals can be achieved and tasks completed (Dawson & Guare, 2010). Self-regulation is one of the most common areas of executive functioning that we work on at SunnyDays. Difficulties in this area seem to impact almost every area of a child's routine and learning tools to manage them can change the course of an entire day!

Many common games support a child's development of executive functioning, but it is important to meet the child where they are at and not challenge them beyond what they are able to tolerate. Here are some of my favorites:

- Red Light, Green Light & Simon Says- great for working on inhibition. These are usually some of the first games I play with new clients in the clinic because they love to get a turn being the caller.
- Candyland- requires regulation and flexibility if you are sent backwards or if you are stuck on licorice.
- Chutes and Ladders- same as above, plus some versions have pictures of children making good choices before they climb the ladder and not so good choices before going down a slide which can lead to discussions about impulse control and monitoring.
- Yahtzee- involves planning, seeing potential options, and remembering what target you were trying to achieve.
- Sorry- one of the most challenging for those with self-regulation and flexibility troubles because of how far you can get before getting sent back home.



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