Executive Functions: They Can Be Hot or Cool
by Dr. Phil Zelazo

We all know it can be a lot harder to think things through in the heat of the moment or when we’re frustrated or angry. But why is that? What’s happening in our brain? To understand why kids—and adults—make decisions differently depending on whether the stakes are high or low, it helps to learn about hot and cool executive functions.

Hot executive functions refer to the self-management skills we use in situations where emotions run high. Cool executive functions refer to the skills we use when emotions aren’t really a factor.

Take, for example, the Marshmallow Test. Developed by psychologist Walter Mischel of Columbia University, the Marshmallow Test assesses how long a child can wait if offered a choice between one small reward immediately or two small rewards later, approximately 15 minutes.

When put to the test, children not only have to weigh information (more later vs. less now), but they also have to resist temptation (candy now!), which is too big a challenge for most 3-year-olds. Their hot executive functions can’t handle it, and they typically opt for immediate gratification.

Knowing about hot and cool executive functions can not only help us make sense of this phenomenon, but it can also help us help children improve these skills.

Developing strategies ahead of time can be helpful. Role-play can help kids prepare for stressful situations. Practicing what to do or say might make it easier for our kids to make the decision we hope they’ll make. Parents can also give children chances to exercise and grow their executive functioning skills in situations kids can manage. This allows them to practice their skills successfully.

To read the full article by Dr. Phil Zelazo, visit: https://www.understood.org/en/community-events/blogs/expert-corner/2016/10/05/executive-functions-they-can-be-hot-or-cool
Executive Function Strategies for Parents: Goldilocks Parenting

If your child has ever complained to you about having too little milk in a glass ("But I’m thirsty!") and then after you added more, complained that it was too much ("I can't finish it all!"), you know how challenging it can be to find the right balance in parenting. It’s like how Goldilocks wanted her porridge to be in the fairy tale. Not too hot, not too cold, but “just right.”

“Goldilocks” parenting, or finding techniques that are “just right” for a child’s autonomy, affects the child’s executive function development.

Most parents, when helping their child to achieve some goal such as finishing a puzzle or completing homework, display one of a few different parenting styles: laissez-faire, or laid-back, sometimes to the point of not being present enough, controlling, or autonomy-supportive.

As you might have guessed, autonomy-supportive parenting works because it’s “just right.” It balances being patient and stepping back (laissez-faire) with being helpful and involved (controlling). When children master challenging tasks with this “just right” level of support from parents, they develop autonomy. This gives them a sense of personal agency ("I did it!") and self-efficacy ("I'm good at figuring things out even if they are hard at first").

What does this mean for you as a parent?

First, try to be mindful of how you parent. It’s not always easy to know when you’re helping too much or too little. However, you can always ask yourself “is this something my child could do on his own without help?” If so, you may want to try stepping back.

Simply being mindful of the “just right” level of support can make a big difference. It can help you know when it’s OK to let your child fail at a task.

Second, consider doing things to work on your own executive functioning skills. Doing so can make you a better parent. Start with small things. For instance, try to take time for yourself to recharge, so you don’t get overwhelmed. Learn and practice self-calming techniques, and try out tips for saving time and being efficient.

Most importantly, if you’re in the heat of the moment with your child, and need a reminder, think of Goldilocks. Not too little, not too much, but just right.
Social and Emotional Development in Schools: The Effects of a One-Sided Report Card

Traditional report cards measure a student’s achievement and progress in specific subjects covered in class, but today, educators are beginning to worry that students are not being prepared for the tests they will face outside of the classroom. These current school reports are too focused on academic achievement, ignoring social and emotional development, including self-control, perspective-taking, and conflict resolution skills.

Some schools have taken affirmative action in making social and emotional learning (SEL) a part of their formal grading system. The George Lucas Educational Foundation, for example, has implemented a guide for educators explaining how to integrate SEL, as well as tips on how to communicate these scores both with parents and on paper. Similarly, the Character Lab offers a Character Growth Card.

An alternative option for schools is to engage students in executive function and self-regulation exercises. Encouraging EF development is highly dependent on both teachers and parents; they need to create routines and set an example for model behavior and supportive relationships. Establishing these competencies in early childhood supports self-control, enables positive choices, and helps set the right course for SEL.

Assessing a student based on more than their ability to retain academic material is key to encouraging a well-rounded, productive, and successful future.

Executive Function and ADD/ADHD

Executive functions and attention-deficit/hyperactivity disorder, or ADD/ADHD, often go hand-in-hand. In fact, when a doctor screens a patient for ADD/ADHD, deficiencies in executive functions are some of the most important signs they look for. When children have ADD/ADHD, they tend to have issues sitting still, focusing their attention, and staying motivated for an extended period of time. These are measurable traits, and a general executive function screening can serve to identify these signs. Here are some of the traits practitioners look for:

**Frustration**
Regulating emotion is an important executive function skill that typically developing children can – for the most part – control with minimal help. For individuals with ADD/ADHD, on the other hand, it’s a different story. When someone with this disorder experiences high emotion such as anger, frustration, disappointment, surprise, and even joy, they have trouble controlling their reaction. It may come off as misconduct to someone who doesn’t understand ADD/ADHD, but it is executive function that is not sufficiently well developed or practiced.

**Self-Action**
Individuals who live with ADD/ADHD often have trouble controlling their impulses. This manifests as hyperactivity, impatience, difficulty waiting turns, blurtling things out, or acting without considering outcomes. It can also be hard for individuals with this disorder to recognize the effect their behavior is having on others in their family, school, or work settings, because deficits in executive function also make it difficult to take someone else’s perspective.

**What can you do to help your child with ADD/ADHD?**
If you have a child struggling with ADD/ADHD and you’re wondering what you can do to address executive function issues, check out our Parent Resources page (reflectionsciences.com/resources/parents/) for helpful information and ways you can help your child strengthen this skillset.