Supporting your Child’s Executive Functions

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Executive Functions are highly interrelated, and requires them to operate in coordination with each other.

- Working memory
- Self-control/Inhibitory control
- Mental flexibility
Sequence of Development
the Barkley Model

Five essential elements:
- Behavioral inhibition
- Working memory (nonverbal)
- Internalization of speech (verbal working memory)
- Self-regulation of affect/motivation/arousal
- Reconstitution

- Barkley (1997)
Yale University School of Medicine

Thomas E. Brown PhD

Executive Functions Impaired in ADD Syndrome

Executive Functions (work together in various combinations)

1. Activation
2. Focus
3. Effort
4. Emotion
5. Memory
6. Action

Organizing, prioritizing, and activating to work
Focusing, sustaining, and shifting attention to task
Regulating alertness, sustaining effort, and processing speed
Managing frustration and modulating emotions
Utilizing working memory and accessing recall
Monitoring and self-regulating action

Source: Brown 2001C
**Hot and Cool Executive Function**

**Used in solving real world problems**

- **Hot EF Skills** - involves the processes that operate in motivationally and emotionally significant situations.

- **Cool EF Skills** - involves the processes that operate in more affectively neutral contexts.

(Zelazo and Muller 2002; see Peterson and Welsh 2014, for a review)
What is Working Memory?

- Manipulating the information, not just giving it back verbatim...
- Immediate knowledge
- Reaching back
- Mixes and processes
- To reach current goal

Short term memory vs. Working memory
- Repeating a set of numbers- 479561 is short term
- Working memory is being able to say them backwards
Working Memory Exercise
Cognitive Flexibility

Described as the mental ability to switch between thinking about two different concepts and to think about multiple concepts simultaneously.
The Stroop Test
Emotional Regulation

The ability to respond to the ongoing demands of experience with the range of emotions in a manner that is socially tolerable and sufficiently flexible...
Cognitive Load Theory

- Provides a framework for understanding the competing demands for our cognitive processing powers.

- Elements to consider
  - Executive Function
  - Working Memory
  - Mental Flexibility
  - Processing speed
  - Language processing
Strategies for Emotional Regulation to support EF Skills

- Emotional Regulation
- Coaching
- Positive Psychology
- Growth Mindset
- Grit
- Mindfulness
Keys to success with Coaching

Allowing the child to have personal choice in putting a plan together - fulfillment.

Taking perspective - cognitive appraisal of self.

Being realistic about the plan, with your child rating commitment level – owning the plan.

Working toward independence in problem solving and having your child experience success - metacognition.
Positive Psychology

Reviewing cultures from all over the world in the pursuit of a universal classification system.

Reviewed a wide variety of religious and philosophical texts.

Found 6 virtues that were valued in almost every culture.

6 Virtues

- wisdom & knowledge
- courage
- love & humanity
- justice
- temperance
- spirituality & transcendence

https://ppc.sas.upenn.edu/
Study on Happiness

1. 3 new gratitudes
2. Gratitude Journaling
3. Random Acts of Kindness

Long lasting effects!

21 days, just 3 weeks leads to 6 months of increased happiness

- Shawn Anchor, TED Talk 2011