

EXECUTIVE FUNCTION SKILLS

Executive function (EF) and self-regulation skills are the mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully.

These skills are crucial for learning and development. They also enable positive behaviour and allow us to make healthy choices for ourselves.

Executive function and self-regulation skills depend on three types of brain function: working memory, mental flexibility, and self-control. These functions are highly interrelated, and the successful application of executive function skills requires these skills to operate in coordination with each other.

The three key aspects of executive functioning are:-

Working memory which governs our ability to retain and manipulate distinct pieces of information over short periods of time.

Mental flexibility which helps us to sustain or shift attention in response to different demands or to apply different rules in different settings.

Self-control which enables us to set priorities and resist impulsive actions or responses. Emotional control and attentional control may be considered to be EF skills.

EF difficulties may appear on their own, but often accompany other specific learning difficulties (e.g ADHD, ASD, dyslexia, dyspraxia etc, prematurity). Delayed EF skills may also result from childhood stress or trauma.

This is a useful website:



1. Short video explaining EF in children and adults is available on the website through this link.

<https://developingchild.harvard.edu/science/deep-dives/adult-capabilities/>

2. A 16-page guide (available for download, below), describes a variety of activities and games that represent age-appropriate ways for adults to support and strengthen various components of EF in children.

<https://developingchild.harvard.edu/resources/activities-guide-enhancing-and-practicing-executive-function-skills-with-children-from-infancy-to-adolescence/>

3. There are a lot of other videos on youtube including this on cognitive flexibility:

<https://youtu.be/dZFtvNeDOdw>

4. 'Interventions shown to aid executive function development in children 4 to 12 years old' by A. Diamond and K.Lee in Investing in Early Education 19/8/11 p.959.

Other Intervention resources:

1. Rethinking Challenging Kids - Where There's a Skill There's a Way | J. Stuart Ablon

TED-X-type talk from Dr Stuart Ablon on Youtube. Drawing from research in the neurosciences, Stuart Ablon suggests ways of thinking about challenging behaviour and a corresponding process by which kids of all kinds can be taught skills of flexibility, frustration tolerance and problem solving.

<https://www.youtube.com/watch?v=zuoPZkFcLVs>

Alison Gray (PhD) 2019