

Executive Function: Building Core Capabilities for Life

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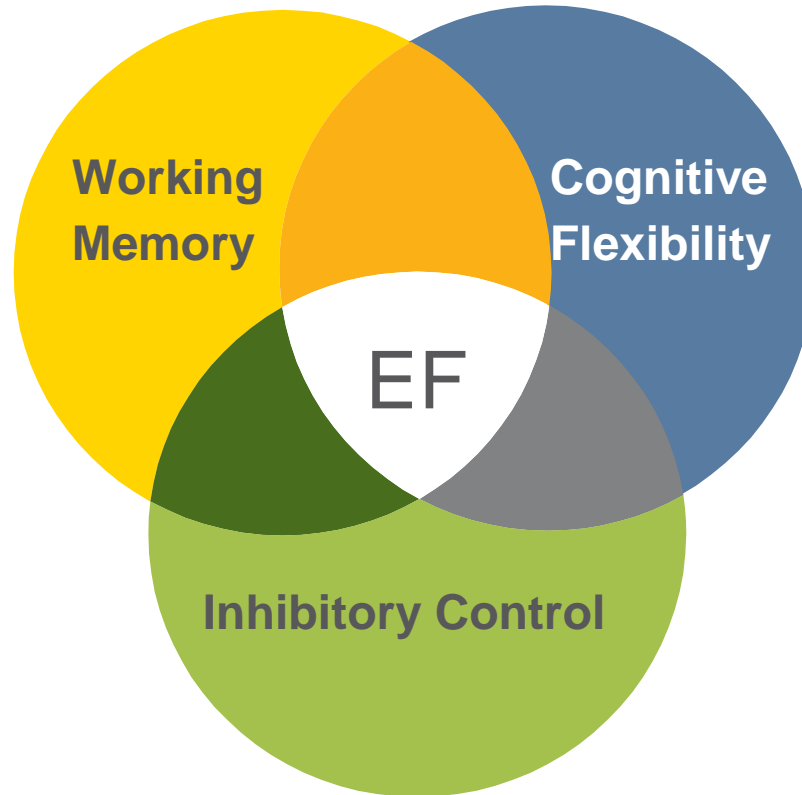
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Definition:

A group of three skills that enable people to organize, plan and carry out a set of tasks in an efficient manner



Three Skills of Executive Function



**Children aren't
born with these
skills—they are
born with the
potential to
develop them.**

-Understood.org

Working Memory

What is it?

The ability to remember and use relevant information while in the middle of an activity



Examples

- Remembering steps in a recipe
- Recalling rules of a game
- Following instructions

Let's Play "Simon Says"

**What do we do
or can we do to
help children
build working
memory?**

Ideas for Working Memory

BABIES (0-18 Months)

- Peek a boo
- Hide toys
- Sing songs
- Fingerplays
- Naming objects

TODDLERS (18-36 Months)

- Songs with actions
- Games that copy actions
- Fingerplays
- Imaginary play

PRESCHOOLER (3-5 Years Old)

- Build background knowledge
- Let children tell stories
- Songs that add movements
- Cooking!

Cognitive Flexibility

What is it?

- Helps people shift gears and think about things in different ways
- It's a key part of problem solving
- Helps in planning tasks

Examples

- Routine at school is different than home routine
- Multiple ways of solving a math problem
- Rules to a game they play are a little different



Read the words

RED **GREEN** **PURPLE**
BLUE **ORANGE** **PINK**
YELLOW **GRAY** **BLACK**

Say the colors

RED

GREEN

PURPLE

BLUE

ORANGE

PINK

YELLOW

GRAY

BLACK

**Which
was
easier?**

**What do we do
or can we do to
help children
build cognitive
flexibility?**

Ideas for Cognitive Flexibility

BABIES (0-18 Months)

- Modify peekaboo games
- Change the words to songs
- Do silly things with objects
- Build together

TODDLERS (18-36 Months)

- Change the motions for songs
- Do things “incorrectly”
- Make predictions
- Matching and sorting games

PRESCHOOLER (3-5 Years Old)

- Use found objects for play
- Make up a story together
- Use complex movements and rhythms for songs
- Puzzles

Inhibitory Control

What is it?

- Being able to ignore distractions and resist temptation
- Helps children to regulate emotions and keep from acting impulsively

Examples

- Marshmallow test
- Not checking your phone immediately when it buzzes
- Holding onto a shaker egg without shaking it

The Marshmallow Test



**What do we do
or can we do to
help children
build inhibitory
control?**

Ideas for Inhibitory Control

BABIES (0-18 Months)

- Bounces that start at stop
- Focus on one activity at a time
- Practice waiting
- Don't give in!

TODDLERS (18-36 Months)

- Change the speed in songs
- Books with movement
- Talk about feelings
- Don't give in!

PRESCHOOLER (3-5 Years Old)

- Freeze games
- Take turns talking
- Activities that require focus
- Don't give in!

**How does
this all affect
us long
term?**

Skills that show success

KINDERGARTNERS

- Get along with others
- Follow directions
- Identify and regulate emotions
- Resolve conflicts
- Persist on tasks
- Engage in conversation and play
- Interpret others' behavior and emotions

<http://www.msue.msu.edu>

ADULTS

- Communication
- Organization
- Emotional Intelligence
- Negotiation
- Critical Thinking
- Focus
- Teamwork
- Confidence

Lifhack.org, American Management Association and Forbes

EXECUTIVE FUNCTION SKILLS

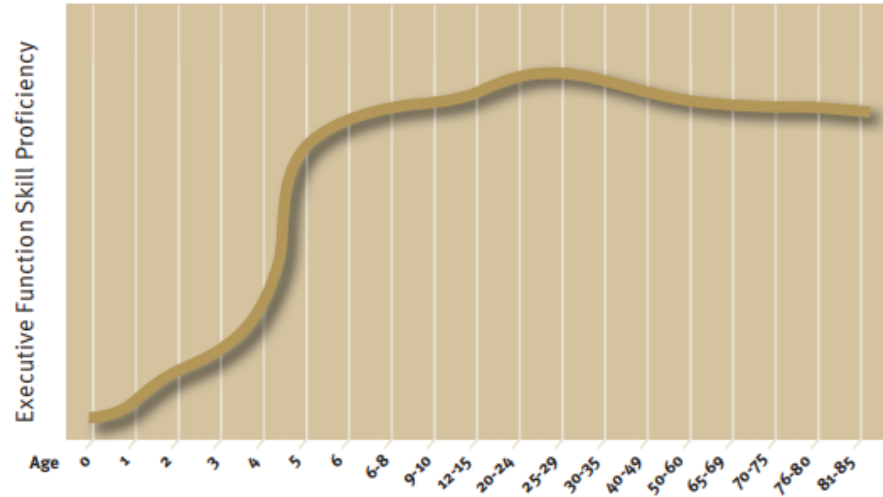
- Pay attention
- Organize, plan and prioritize
- Stay focused until task is complete
- Understand different points of view
- Regulate emotions
- Keep track of what you're doing

understood.org

**What do you
notice about
all these
skills?**

When do we start learning EF skills?

Executive Function Skills Build Throughout Childhood and Adolescence



A range of tests measuring different forms of executive function skills indicates that they begin to develop shortly after birth, with ages 3 to 5 providing a window of opportunity for dramatic growth in these skills. Growth continues throughout adolescence and early adulthood; proficiency begins to decline in later life.

Source: Weintraub et al. (In Press).³⁹



PLAY

What does this look like?

- It's scaffolded
- Establishes routines
- Models social behavior
- Creates and maintains supportive relationships
- Fosters creative play
- Develops social connection
- Teaches how to cope with stress

All while decreasing adult supervision over time!



**What additional
things did you
think we do or
could do?**



Questions?
Comments?
Last thoughts?

Resources

- [Harvard Center for Developing Child](#)



HARVARD UNIVERSITY

Center on the Developing Child

[Activities to Develop EF Skills](#)

- [Understood for Learning and Attention Issues](#)

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for learning & attention issues