

# Executive Function: Building Core Capabilities for Life

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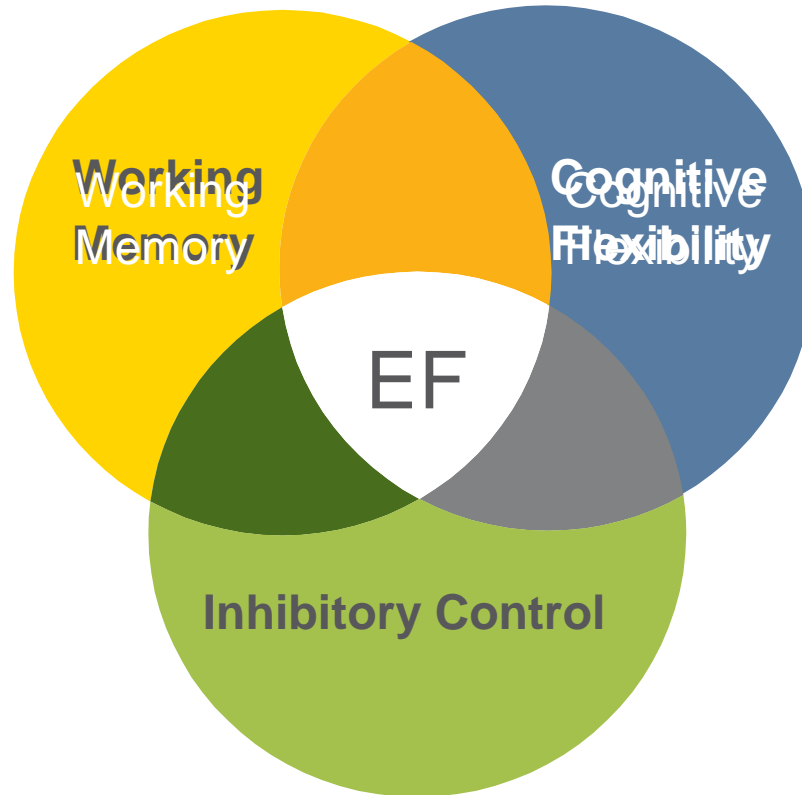
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## Definition:

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

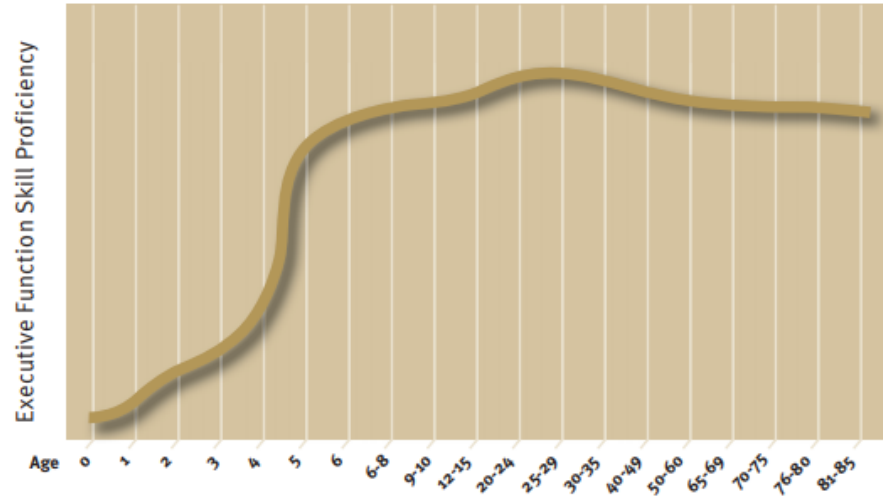
- Pay attention
- Organize, plan and prioritize
- Stay focused until task is complete
- Understand different points of view
- Regulate emotions
- Keep track of what you're doing

[understood.org](http://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).<sup>19</sup>



**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](#)

**Understood**

*for learning & attention issues*