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MindWell Psychology

Executive Functioning

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What is Executive Functioning?

- + These are the skills one needs to execute or perform a task from beginning to end.
- + Executive Functioning (EF) skills determine how well our children can complete simple tasks such as cleaning their room, getting ready for school in the morning, remembering to bring all the materials they need to complete their homework, remembering to turn in homework that they have completed, not waiting until the night before to study for a test or start their science project.
- + EF skills are directly related to how much external support our children require to complete these tasks.

Executive Functioning Skills

- + Planning/Prioritization
- + Organization
- + Time Management
- + Working Memory
- + Task Initiation
- + Sustained Attention
- + Goal-directed Persistence
- + Flexibility
- + Response Inhibition/
Behavior Control
- + Emotional Control
- + Metacognition

Definition of Executive Functioning Skills in Order of Developmental Progression

Smart but Scattered by Peg Dawson and Richard Guare

- + **Response Inhibition:** The capacity to think before you act. Resist the urge to say or do something before you have time to evaluate a situation and the impact of one's behavior.
- + **Working Memory:** Ability to hold information in memory while performing tasks. Ability to follow multi-step directions. Ability to use learning from past experiences and apply to current or future situation.
- + **Emotional Control:** Ability to manage emotions in order to control behavior and complete tasks. Recover quickly from disappointments, manage anxiety to motivate instead of procrastinate.

Definition of Executive Functioning Skills in Order of Developmental Progression

(continued) Smart but Scattered by Peg Dawson and Richard Guare

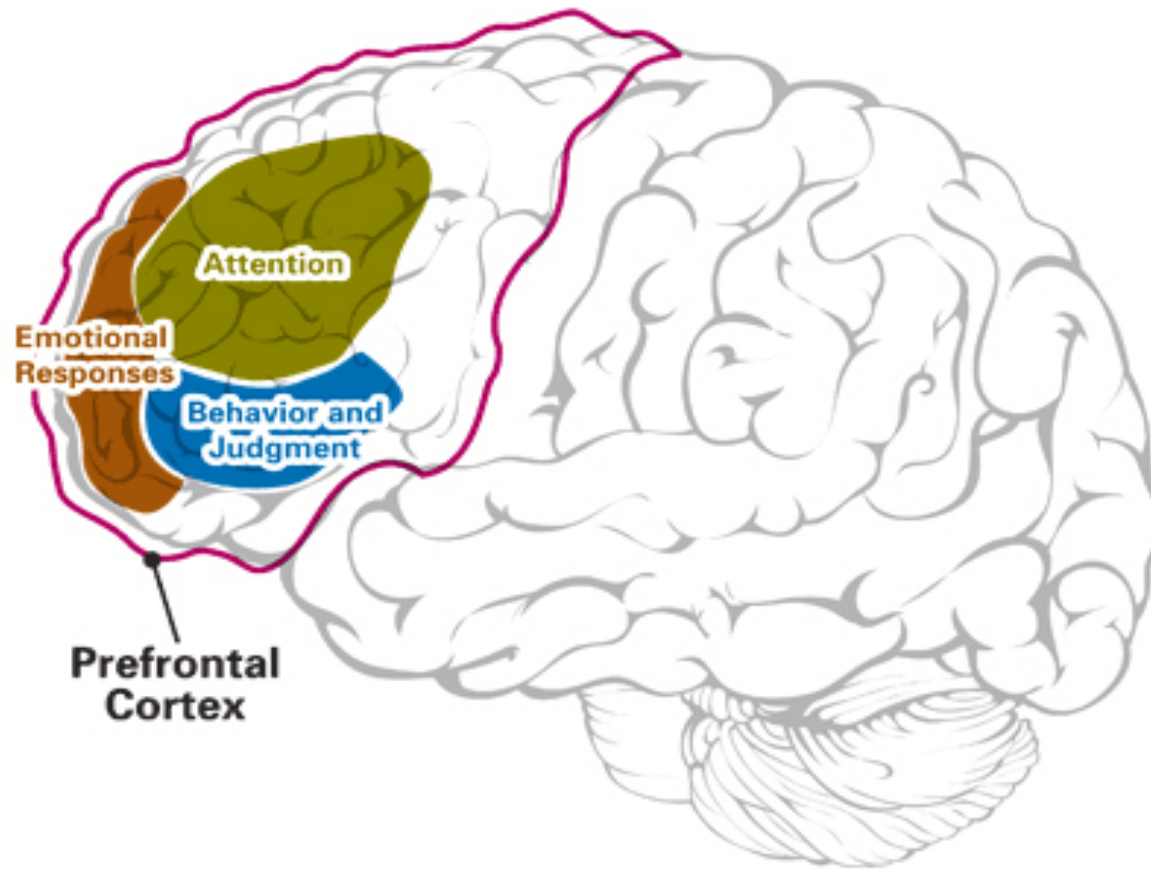
- + **Sustained Attention:** The capacity to keep paying attention to a situation despite distractions, being tired or bored by the task at hand.
- + **Task Initiation:** Ability to get started with minimal procrastination and in a timely and efficient manner.
- + **Planning/Prioritization:** Ability to know what steps are needed to reach a goal or complete a task/project. Ability to focus on what's important and put the steps in order of their importance.
- + **Flexibility:** Ability to change or revise a plan.

Definition of Executive Functioning Skills in Order of Developmental Progression

(continued) Smart but Scattered by Peg Dawson and Richard Guare

- + **Organization:** Ability to keep track of information and materials. Capacity to create and maintain systems for ongoing organization.
- + **Time Management:** Capacity to estimate how much time one has, how to use your time wisely, how to keep to a deadline. Have a sense of time and urgency.
- + **Goal-directed Persistence:** Capacity to set goals and stick with them to the end without getting distracted or discouraged.
- + **Metacognition:** Ability to stand back and self-monitor and self-evaluate your performance.

The Human Brain and Executive Functioning



The Role of Nature Vs. Nurture in EF

- + The blueprint for brain development begins before birth and is dictated by genes – Nature
- + Brain goes through rapid growth from birth to about six years and then pruning or getting rid of connections that are not used (“use it or lose it”) – Nurture
- + Executive skills don’t develop evenly and both nature and nurture play a role. Don’t expect your children to learn through osmosis and observation alone. Executive skills can be taught. Use their strengths to support their weakness. Practice makes perfect.
- + Frontal Lobes take time to develop and don’t fully mature until your mid-twenties. Last part of your brain to mature

EF and learning/attention issues

- + ADHD
- + Learning Disabilities
- + Mood/Anxiety Disorders
- + ODD/Conduct Disorders
- + Autism Spectrum Disorders
- + Other Medical and Neurological Disorders (FAS, TBI)

EF deficits and emotions/behavior

- + Self Monitoring: lack of awareness
- + Self Regulation: emotional lability
- + Self Control: acting without thinking, acting on emotions
- + Self Determination: lack of persistence, easily overwhelmed

Developmental Tasks Requiring Executive Skills: Preschool

- + Run Simple Errands (e.g., get your shoes from the mudroom)
- + Perform simple chores and self help tasks with reminders (i.e. brush teeth, get dressed)
- + Inhibit behaviors: don't touch a hot stove, run into the street, snatch a toy from another child, hit, bite, etc.



Developmental Tasks: K- Grade 2

- + Bring papers to and from school
- + Complete homework assignments (20 minutes maximum)
- + Inhibit behaviors: follow safety rules, don't swear, raise hand before speaking in class, keep hands to self
- + Tidy bedroom or playroom



Developmental Tasks: Grades 3-5

- + Perform chores that take 15-30 minutes long (vacuuming, dusting)
- + Keep track of belongings when away from home
- + Complete homework assignments (1 hour maximum)
- + Keep track of changing daily schedule (different activities after school)
- + Inhibit/self-regulate: behave when teacher is out of classroom, refrain from rude comments or bad manners

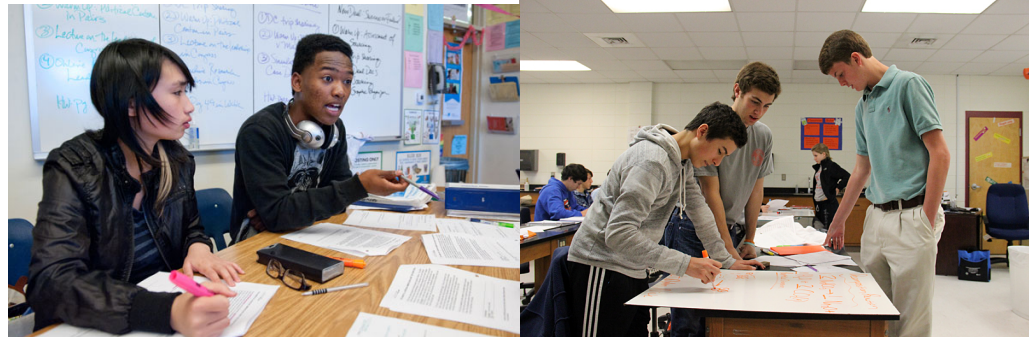
Developmental Tasks: Grades 6-8

- + Use system for organizing schoolwork; including assignment book, notebooks, etc.
- + Follow complex school schedule involving changing teachers and changing schedules
- + Plan and carry out long term projects, including tasks to be accomplished and reasonable timeline to follow; may require planning multiple large projects simultaneously.



Developmental Tasks: High School

- + Manage schoolwork effectively on a day to day basis, including completing and handing in assignments on time, studying for tests, creating and following timelines for long term projects, and making adjustments in effort, and quality of work in response to feedback from teachers and others (i.e. grades on tests, papers).
- + Establish and refine a long term goal and make plans for meeting that goal.



What Do Executive Skill Weaknesses Look Like at Home and School?

- + Acts without thinking
- + Interrupts others
- + Upset by change in plans
- + Has trouble making decisions
- + Talks or plays too loudly
- + Acts wild or out of control
- + Gets overly upset about “little things”
- + Doesn’t notice impact of behavior on others
- + Chooses “fun stuff” over homework or chores
- + Finds it hard to figure out how to get started
- + Forgets directions
- + Forgets to bring materials back and forth between home and school
- + Runs out of steam before finishing work
- + Loses or misplaces things
- + Messy desk/room/backpack
- + Sloppy work
- + Leaves long-term assignment or chores until last minute
- + Isn’t able to think about or work on more than one thing at a time
- + Finds it hard to incorporate feedback

EF difficulties are often misunderstood

- + She's spoiled
- + He's lazy
- + She doesn't care
- + He's a jerk
- + He won't
- + He's a wuss
- + There's a problem with the parents

Helpless Harry

At Home and School



- + Encouragement
- + Structure their independent work (You'll try for 5 minutes, then I'll come check)
- + Give them a fallback (If you try 3 times and still can't get it, put a star next to it and we'll look at it together)
- + If they become upset, do not rush in to solve the problem. Reflect on their feelings (This is hard for you, it can be frustrating) then reinforce their independence (Just keep trying and I'll be there in 3 more minutes)
- + Reinforce/reward effort rather than correct answers

Distracted Dan

At Home and School



- + You provide the structure and make it clear to them
- + Set a clear goal: A line under 5 spelling sentences, a colored box around 10 math problems on sheet, a sticky tab on third page of reading
- + Use a timer to help keep them be aware that you will be back in 5 or 10 minutes and expect to see progress
- + Have them review the work for careless errors prior to you reviewing; getting a reward when they review and FIND errors
- + Implement a homework log which teacher signs confirming assignments have been written correctly and you sign after they are completed at home

Specific Teaching Routines

General Guidelines for Developing Instructional Routines for Younger Children

- Keep them short
- Reduce the number of steps involved
- Use pictures as cues rather than written lists or instructions
- Be prepared to provide cues and supervision, and in some cases aiding the child, side by side

General Guidelines for Developing Instructional Routines for Older Children

- Make them full partners in the design of the routine, selection of rewards, and troubleshooting that may help improve the routine
- Be willing to negotiate rather than decide
- Whenever possible, use visual cues rather than verbal cues (since they can sound like nagging to an older child)

Part One: Developing Self Awareness

- + Helping our kids become mindful, “Know Thyself” --Socrates
- + Increasing metacognitive awareness
- + “Stop and Stepback”



Teaching Self Awareness: Label the feeling, not the child

- + Feelings are not wrong
- + Labels hurt, labels last
 - stupid bossy
 - lazy worry wart
 - princess unmotivated
 - brain spacey
 - brat spoiled
 - fussy stubborn
 - spaz thin-skinned



Why label our kid's feelings?

- + To teach self awareness—so they can recognize their own emotions
- + To increase metacognition
- + To connect with them
- + It brings relief



Part Two: Teach Coping skills

When EF is immature, people tend to:

1. Get emotionally flooded
2. Withdraw/shut down
3. Lash out
4. Try to escape



Developing frustration tolerance

- + Grit
- + Resilience
- + Perseverance
- + Effort is hard work!
- + Mistakes are part of learning
- + "It's OK to fail"



Part Three: Emotion Coaching

- + Times of stress bring opportunities for closeness
- + Label feelings, give feedback, support solutions
- + *Don't solve their problems for them*



Part Four: Offer Constructive Feedback

Praise –the curse and the blessing

- + Praise actions, effort, choices
- + Praise what you want more of
- + Use Descriptive praise
- + Don't over do it
- + Honor the child's perspective



Complaints versus Criticisms

- + Criticism: You're such a slob! You never lift a finger to help out around here
- + Complaint: There are Skylanders all over this floor
- + Criticism: You failed because you always blow off studying. I told you so!
- + Complaint: There was too much x-box and not enough studying last night. How can we make sure this does not happen again?

Part Five: Modeling-- Be the change you want to see in your child

Model positive “self-talk”

- + This is hard, but I can do it
- + I’m going to face my fear
- + I can stick with it

NOT:

- Oh I’m so stupid
- I am horrible at this
- I can’t stand this!
- I need a drink!



Troubleshooting

- + Kids pressure us to solve their problems
- + Kids pressure us to rescue them
- + Kids can drag us into the emotional vortex by 'catastrophizing'



Our job is to help teach our children these skills and not do the work for them.

Remember “Use it or Lose it”!

Resources and Websites

- + www.russellbarkley.org
- + www.understood.org
- + www.developingchild.harvard.edu
- + www.smartbutscatteredkids.com
- + www.ldonline.org