

## When Behavior is Affected by Executive Functioning

### “KIDS DO WELL IF THEY CAN”

- Dr. Greene

#### Who are we talking about?

All “teenagers” and children have weak executive skills, Executive skills mature around age 25

The medical reasons behind a disability- Brain structure and Dopamine.

There is less dopamine produced in individuals with ADD and during adolescence.

- Dopamine allows us to feel pleasure and it can mobilize many of the body's energy reserves.
- This is why a primary part of intervention involves providing rewards or positive feedback until an individual is physically capable of completing the given task without assistance

#### Executive Functioning: The Self-Management System of our Brain

The air traffic control center of our brain that allows for flexibility: make an alternative plan

Socially they are critical: inhibit inappropriate behaviors

#### The Importance of DOING: Execution means “to do”

Encourage the plan AND execution with only guidance- it WILL take longer at first but it is part of brain development

- Talk out loud to model our future thinking, Discuss “how” and “when”
- WAIT time is critical!!
- If they struggle, let them instruct you in the execution and Make it fun!

#### Details about Executive Functioning

--Many studies correlate with cases of ADHD/ADD

-ADHD research is showing it can take these kids 3 years longer to develop self-management skills

-Issues with Executive Functioning should be considered a developmental delay NOT a behavioral choice

-Lagging executive functioning WILL affect behavior

-A lack of executive function skills can look like behavior is intentional which can negatively impact self esteem and make people think they are “bad” kids who are unmotivated

#### Attentional Deficits

-Impulsivity- Start without all the instructions, blurt, talk or act before thinking

-Poor sense of time- Short passing periods, managing lockers, planning for next class

-Missed instruction or work production- can't start, can't persevere

-Focus to keep working on tasks that aren't interesting

-Distractions- visual, auditory, ideas in their head

-Behavior- can't regulate

-Executive skills are important to mention because it may be the only thing affecting the behavior you see

-Executive skills aren't the same as cognitive skills and aren't related to IQ.

-They are skills that make it hard to execute or learn from experience.

\*\*\*Executive skills are worse when a child is stressed, tired or has SIGNAL issues (and sensory processing issues)

#### Executive skill weakness symptoms:

Can't start work, trouble finishing work, distractions, or everything takes WAY too long

May do homework, but doesn't hand in homework

Poor planning: always late, never have supplies, seem lost, forget instructions

Low tolerance for frustration

Doesn't notice impact of their behavior on others

Chooses fun over homework

Meltdowns because work isn't done, AGAIN. Difficulty remembering last time this happened (yesterday!)

Disorganized writing, and spaces they inhabit

#### How does this affect a student?

- o Trouble making and/or keeping friends
- o Executive functioning disorders are ultimately invisible disabilities that can profoundly affect a child's life both at home and at school.
- o These kids can be poor test takers (especially with the recent common core curriculum changes that require more writing vs. multiple choice)
- o They may struggle with prioritizing what to study, then not accurately monitor their time to take a test or write a response
- o They may struggle with ignoring irrelevant information and then shift from the main idea to irrelevant details which affects the kind of projects they complete or how their essays will turn out

#### POOR EXECUTIVE SKILLS CAN LOOK LIKE POOR BEHAVIOR

Consider how executive skills impact behavior and attention

Executive skills determine what's worth attending to and what's WORTH doing

A lack of executive function skills can look like behavior is intentional (looks like defiance, lazy, not motivated)

#### Top five issues I see in classes:

- WRITING!! For every subject...whether it is a lack of organized writing, starting a writing project, random thoughts, legibility
- Starting work and staying focused
- Handing in homework: work cycle completion
- Having materials: pencils, papers, charged computer
- Behavior- usually poor because of all the above!

### Things we may see:

- A 20 minute task can take 4 hours
- Thoughts can't get on the page
- A bedroom or school desk can be destroyed in moments
- Constant distractions make teaching moments impossible
- Assignments given four weeks prior are being completed at 11pm the night before

### Why do kids struggle more as they get older?

If Executive skills are related to brain development, why when kids hit middle school, or high school do we see more issue? Shouldn't it get easier?

- Juggle more classes, more materials
- Different teachers with different expectations
- Life moves faster- passing period expectations: locker, bathroom, getting needed materials
- More homework with more to remember
- Expectations are different- more independence and responsibility
- Content is getting harder so the kids who could "fake it" before now have to use skills they may have never developed- GATE kids may not know HOW to study and now it is physically impossible to know without putting in more work- many of these kids have never had to do this!

### Temporal-Spatial Window: WHY YOUR STUDENT "FORGOT" THEIR PENCIL AGAIN

Our Perception is Critical...Again

90% of the time, task planning takes place in a different space from where the execution occurs: (temporal-spatial window)

...Is your assumption of their skill level what is setting them up to fail?

...If kids with attentional deficits can be 3 years delayed, could this explain their behavior?

...If this child COULD do what we are asking (and all the steps involved in the instruction), don't you think they WOULD??? DOESN'T EVERYONE WANT TO BE SUCCESSFUL?

### EXECUTIVE SKILL STRATEGIES

- -We can help teach to develop or strengthen executive skills even though they may mature naturally through development
- -We can coach and provide strategies until the skills are intact or developed (The ALSUP)
- -OR...we can loan the child our frontal lobe for a while and adjust the activity or environment with accommodations and modifications

### ALSUP: Lives in the Balance.org

Assessment lagging skills & Unsolved problems

1. Figure out the unsolved problem (hitting, screaming, defiance are behaviors)

2. Adult theories confuse problems: assumptions are often wrong
3. Unsolved problems are split not clumped
4. Be specific

Refused to work vs. Difficulty starting/completing the volcano writing page

BEHAVIORS ARE NOT THE UNSOLVED PROBLEMS! (Fever vs. Flu/Strep)

Effective Coaching or The ALSUP

Find the Real Problem in 3 steps

Child's input FIRST...then adult can help and THE WHY is easier to talk about when we use fewer words

They are the expert and can problem solve with your HELP

The helper shouldn't make the situation worse ("look at me", "tell me why you did that?")

Steps of the ALSUP

Step 1: Child Concern

Empathy Step is the first place to start...ALWAYS!

- Gather information and get a clear understanding of the child's concern
- If the child doesn't talk or says "I don't know" figure out why...
- Maybe the problem was an adult theory
- Maybe the problem is too big and needs it broken down
- Maybe the child needs time to think
- Consider all the executive skills that might affect behavior with this child

Reflective Listening and Clarifying Statements: Empathy depends on this jargon

Mirror what the child says then encourage more information

- "How so?", "I'm confused", "What do you mean?"
- Ask about the who, what, where and when: "Who was making fun of your clothes?", "What's getting in the way of going to SFA?"

"I noticed the other kids in class were writing...what's up?"

Step 2: Adult Concern

Define the adult's concern about the problem or unmet expectation

- "The thing is....", "My concern is..."
- There is plenty of room for the child and adult concerns
- Make sure the child's concern is always on the table and considered important

The focus to this point is related to concerns, there is NO problem solving yet

### Step 3: Brainstorming Solutions

Adult invites the child to solve the problem collaboratively

Give the child the first crack at a solution, "Do you have any ideas?"

This doesn't mean the adult's solution won't be part of the equation

Good Solutions meet two criteria:

- 1. Realistic
- 2. Satisfactory to both adult and child

The Different Executive Skills

Adapted from : Smart but Scattered

-Response Inhibition: Do they start before instruction or take action without all the facts?

-Working Memory: How do they manage facts, details, or complete tasks after instruction?

-Emotional Control: Do emotions affect performance? Can they control behavior?

-Task Initiation: Do they have trouble starting a task? Do they have trouble starting after a break?

-Sustained attention: Can they focus even though something isn't interesting to them?

-Planning/Prioritization: Do they do what's most important, first? Can they plan out steps for success?

-Organization: Are thoughts organized in writing? How does their desk, locker or bedroom look?

-Time management: Do they procrastinate? Are they often late? Can they estimate how long work will take?

-Flexibility: Do they get thrown off by the unexpected? Can they shift between tasks and still perform?

-Metacognition: Can they evaluate their own performance? Do they review work before turning in?

-Goals-Directed Persistence: Follow through on non-preferred, long task

-Stress Tolerance: Do they crumble under pressure? Is unpredictability tough?

### Working memory

- 1. Phonological loop- process sound
- 2. Visuospatial- process visual image

### Crystal Ball: Future image involves looking into a crystal ball

- Planning- plan, sequence, prioritize, organize in our mind
- Execution: Initiate, inhibit, pace, complete work
- Self-monitor: problem solve how to get un-stuck, what is their motivation to start and persevere

Working Memory and the "Mind Mime": (Sarah Ward and Kristen Jacobsen) A mind mime is a way to see into the future for "if...then" thinking

M- Make an image I- Imagine how I look in this future situation (future glasses)

M- Mental time travel or "how am I Moving" E- Emotions I feel in the future after I'm done.

### Executive skill: Time management: critical for executive skill development

If you don't have a concept of time, you can't execute

There are very few time markers today because of technology, instant messaging, DVR's etc...no one has to wait

Kids don't understand the "sweep of time"

Play is different today and executive skills aren't forming

Instant gratification with technology is also changing the way brains develop and work

### What does time look like? What does procrastination look like?

Utilize an analog clock to help kids see how long an activity takes in class

Help them break up the parts, and help them estimate how long something should take

Help them see a visual effect of procrastination- use a calendar ...move as they put off one part of task to see how they stack up the night before they are due

### Managing the "Time Robber" (\*\* Another brilliant concept by Cognitive Connections)

OR>>> Where did the time go?

Goal-Directed Persistence & Task Initiation: When an activity isn't interesting to a child, it is hard for their brain to get signals. Dopamine helps the brain execute, but kids (especially teens) and those with ADD/ADHD don't have enough Dopamine. These signals help a child stay focused and start doing work- especially work they don't want to do!

### Some STRATEGIES to help with focused attention:

- FIRST: talk to them about what they want to do when they are done- this can help them do what the Dopamine in their brain was supposed to do.

-Use a timer: let them guess how long one problem might take, race themselves or at the very least, know when they can be done

-Use a reward for work completion. Even a snack, points for each problem (make sure they can accomplish the work to earn the reward, aka the "just right challenge")

### Other Ideas To Consider:

Use a hands-on approach, Emphasize critical information or "big picture", Preview new concepts at the beginning and highlight at end, Remember activity goal: if it's spelling, don't focus on handwriting, if it's writing a paragraph, don't penalize for spelling, Increase or eliminate time limits, Be willing to adjust the amount of work-mastery in 4 problems vs. 30, Show disapproval of behavior, not the child

### Executive Skill: Writing Issues: °Of all academic tasks, writing requires the most executive skills!

- \*\*this is why alternative learning methods besides paper and pencil help these kids to truly retain!
- The area of the brain that affects writing and word processing (graphomotor) is the same as for executive skills
- Dictation
- Pictures vs. words in organizers

### Executive Skill: Initiation for writing projects: Kids often shut down before they even start

Use pictures to peak interest

### Tricks for Random and disorganized writers

Use 3 colored highlighters to organize thoughts within the page they wrote or dictated

During the planning phase have kids look up images that address the main topics they are discussing- they can take notes on different post-it pages for each picture.

These post-it pages of ideas or facts can be easily moved and rearranged to organize BEFORE writing

### HOW CAN WE CHANGE THE TASK OR ACTIVITY?

- Make tasks shorter or build in breaks during a long task
- Make steps very explicit- maybe write them down
- Provide both auditory instruction and visual demonstration or picture cue
- Let the child fill in relevant information vs. coming up with content- especially when initially learning content
- Decrease the social complexity

Study Space Examples

### Coaching: CRITICAL FOR MIDDLE SCHOOL WITH TRANSITIONS, DIFFERENT CLASSES, LOCKERS

Review self-monitoring and hold them accountable for the “doing”

\*\*\*Coaching is done out of the moment \*\* (fight or flight)

Declarative language helps kids “see” and “know” how to plan and execute

Talk out loud when you work through a problem or a plan- talk your kids through your mental image through time and space...make predictions, ponder opportunities, consider possibilities and reflect on past experiences

Invite child to notice information and develop a plan vs. following a direction (receptive language skill) “get your planner, pencils and calculator” vs. “what do you need for this homework”

“Time and time again, research (and practical experience) has shown that the most reliable factor leading people to change-by far- is the relationship they have with the person helping them change.”

-Dr. Greene

### Apps, Equipment, Etc.

360 thinking time tracker app- clock that shows “get ready, do done” colors

[Onlinestopwatch.com/largeonlineclock](http://Onlinestopwatch.com/largeonlineclock)

[Cognitiveconnections.com](http://Cognitiveconnections.com)- time cop, time robber, planner

Dynamic seat cushions- [isokinetics.com](http://isokinetics.com) but also found at amazon

Snap Type app lets you take a photo of a worksheet and write or type on it First...Then app lets you take pictures and quickly put them into first then jargon but you can always just use your phone/iPod camera

Planner pro- Daily calendar. View month/week, track task, make lists, sync between devices

Forest app: forest-stay focused (\$1.99)

Books or Authors for Executive Functioning, and Behavior

Dr. Greene: The Explosive Child, Lost at School, Lost and Found

Ana Homayoun: That Crumpled Paper Was Due Last Week

Howard Glasser: Transforming the Intense Child Workbook (and all other Nurtured Heart Approach books)

Richard Guare PhD, Peg Dawson EdD, et al. Smart but Scattered (all of their books are good- one for teens too)

Sarah Ward, Kristen Jacobsen. Epractice.com, Cognitive Connections

(Barkley 2012) Barkley, Russell A. Executive Functions: What They Are, How They Work, and Why They Evolved.  
New York: Guilford, 2012