Activity

You will have 10 minutes to fill out the Adult Executive Functioning Questionnaire.
Strategies to Support Executive Functioning

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What is Executive Functioning?
<table>
<thead>
<tr>
<th>Key Components of Executive Functioning</th>
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<td>11. Goal-Directed Persistence</td>
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<td>12. Stress Tolerance</td>
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Everyday Challenges in College

1. Activation
2. Focus
3. Effort
4. Emotion
5. Memory
6. Action
Two Distinctive Parts:
Pathway of Information:
Pathway of Information:

Normal flow of information:
- Motor cortex
- Prefrontal cortex
- Visual cortex

Flow of information under stress:
- Motor cortex
- Prefrontal cortex
- Visual cortex
List of Disorders That Affect Executive Functioning

- Traumatic Brain Injuries (TBI)/Concussions
- Autism Spectrum Disorder (ASD)
- Specific Learning Disorders (SLD)
- Attention-Deficit-Hyperactivity-Disorder (ADHD)
- Anxiety Disorders
- Depressive Disorders
- Bipolar Disorders
- Schizophrenia and other Psychotic Disorders
TBI + Concussions

Heterogenous - all injuries are different

Possible problems with:

- Working Memory
- Processing Speed
- Attention
- Response Inhibition
- Flexibility
- Organization and planning
- Emotional control
Autism Spectrum Disorder

- Problems with planning and flexibility
  - Need for structure
- High levels of variability
- Task-based difficulty
  - Selective impairments depending on task
- Studies differ in results
  - Some report memory and attention deficits
  - Others report no dysfunction with memory or attention
- No clear picture - very heterogeneous
- Response inhibition not related to executive functioning
Specific Learning Disorders and ADHD

Lots of research focuses on comorbid SLD and ADHD diagnosis

Difficulty with memory, multitasking and processing speed in SLD

- Problems analyzing information quickly and efficiently
- Can lead to time management problems

ADHD associated with attention and memory problems, multitasking, and response inhibition

- Possibly poor organization and planning
- Time management skills

“Executive Functioning Disorder” used interchangeably with ADHD

ADHD = neuropsychologically heterogeneous

- Multiple “subgroups” even within types
Executive Functions Often Impaired in ADHD

1. Activation
2. Focus
3. Effort
4. Emotion
5. Memory
6. Action

Organizing, prioritizing, and activating to work
Focusing, sustaining focus, and shifting focus to tasks
Regulating alertness, sustaining effort, and processing speed
Managing frustration and modulating emotions
Utilizing working memory and accessing recall
Monitoring and self-regulating action

Anxiety and Depressive Disorders

Emotional control impacted in both disorders

Trouble with Anxiety Disorders and multitasking
  Often worry too much about the “more important task”
  Can get stuck on certain thoughts

Impaired memory with anxiety
  Cortisol plays a role

Depressive Disorders associated with working memory and cognitive flexibility

Results mixed on planning, inhibition, problem solving
  Highly variable

Problems with attention and focusing if task is demanding
  Otherwise, normal

Deficits in executive functioning may remain during remission
Bipolar Disorder and Schizophrenia

Disorders overlap in genetics, neurology

Evidence that cortical thickness related to deficits

Cortical thickness associated with cognitive functioning

Those with schizophrenia show more difficulty with response speed and accuracy

Greater attention and inhibitory problems, planning, and organization problems

Bipolar problems with inhibitory control, working memory, attention

Bipolar problems regardless of state (manic or depressed)

Though mania associated with more deficits, worse inhibitory control and attention

Deficits present whether symptoms are active or not

Both disorders show difficulty with multitasking, emotional control

Executive functioning remains dysfunctional or declines with time
Scenario 1:
Creating Structure/Schedules
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Structure/Schedules

Response Inhibition

**Working Memory**

Emotional Control

Task Initiation

Sustained Attention

**Planning/Prioritization**

Organization

**Time Management**

Flexibility

Metacognition

Goal-Directed Persistence

Stress Tolerance
How To Help:
Scenario 2: Starting Homework/Projects
Key Components of Executive Functioning

- Response Inhibition
- Working Memory
- Emotional Control
- Task Initiation
- Sustained Attention
- Planning/Prioritization
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## Starting Homework/Projects

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How To Help:
Accommodations That Can Help!

- Livescribe Pen
- Google Read and Write
- Inspiration
- Extra time on tests
- Distraction reduced environment
- Notetakers
Technologies That Can Help!

WatchMinder
MotivAider
MY tiny REMINDER
Google Keep
Any.do
myHOMEWORK
EverNote
References


