



# Executive Functioning Skills: The Real Reasons Why Students with Mental Health Conditions May Struggle Academically

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# Agenda for today's session....

- ▶ Define executive functioning skills
- ▶ Review of common executive functioning skills
- ▶ Specific strategies to develop self-management skills

# Students with Mental Health conditions (MHC)...

- ▶ Large and fast
- ▶ Higher risk:
  - ▶ Low educational attainment
  - ▶ Lower grade point average
  - ▶ Higher rates of drop out regardless of psychiatric disability, geographic location, & education level
- ▶ Life long impact:
  - ▶ Human capital development
  - ▶ Future employment (unemployment & underemployment)

# Research tells us...

## Unique clustering of obstacles:

- ▶ Navigating an unfamiliar service system
- ▶ Weak study skills & inconsistent academic knowledge
- ▶ Negative perception of self
- ▶ Lack of transportation
- ▶ Faculty attitudes
- ▶ Disclosure dilemmas
- ▶ High academic anxiety
- ▶ Monitoring & managing symptoms & wellness strategies
- ▶ Medication side effects
- ▶ Figuring out how to obtain necessary supports
- ▶ Finding new supports on campus
- ▶ Internal & external stigma
- ▶ **COGNITIVE DEFICITS & Executive functioning difficulties**

# What are the skills with which students struggle?

Barriers endorsed by students in our multi-site SEd study (Mullen, 2011)

Over **70%** of respondents:

- Concentration (85%),
- Time management (77%),
- Stamina (75%),
- Organization (71%),
- Prioritizing tasks (70%)

Over **50%** of respondents:

- Difficulty memorizing information
- Managing psychiatric symptoms
- Studying for exams
- Taking exams
- Preparing for class
- Writing papers
- Taking notes
- Researching information
- Meeting deadlines

# Terminology

- ▶ **Cognition**- A set of mental processes that underlies learning, including attention, memory, comprehending language, verbal and visual recognition, computation, reasoning, and problem solving (Green et al., 2004).
- ▶ **Executive Functions** (“cognitive control system”)- An umbrella term for the cognitive processes that help thought and action (Friedman et al., 2008).

# What are the “functions” in “Executive Functions”?

1. **Planning** – plotting a sequence of steps to achieve a goal
2. **Reasoning** – thinking through info in a logical way
3. **Attentional control** – choosing how one directs their attention
4. **Inhibiting automatic responses** – resisting urges that lead to undesired outcomes
5. **Working memory** – the ability to hold and process information

Let's take a closer look...

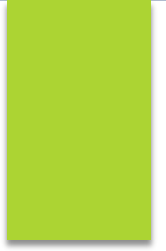


They do Exist!

EXECUTIVE  
FUNCTIONING  
LIMITATIONS



EF limitations can  
be more  
problematic than  
symptoms



# EFs are Crucial to Post-secondary Success

1. **Planning** → large projects, papers, group work, voicing what you need, time management
2. **Reasoning** → assignments involving critical thinking, speculation, internship performance
3. **Attentional control** → sitting in class, reading long text documents
4. **Inhibiting automatic responses** → staying on task, follow through, “grit”, keeping deadlines, acknowledging classroom norms
5. **Working memory** → note-taking, exams, class participation, clinical practice

# There are Clues!

## Look for changes in:

- ▶ **Duration**
- ▶ **Severity**
- ▶ **Baseline behavior**

1. **Planning** → late to class, poor quality assignments (rushed), late assignments, missed exams
2. **Reasoning** → trouble connecting previously discussed ideas with current ideas, poor essay answers on exams
3. **Attentional control** → Staring off into space, repeating questions, unfinished assignments
4. **Inhibiting automatic responses** → speaks out of turn (interrupts), preoccupied with technology
5. **Working memory** → “What was the point I was trying to make?” lack of participation, difficulty holding on to what’s read/seen/heard

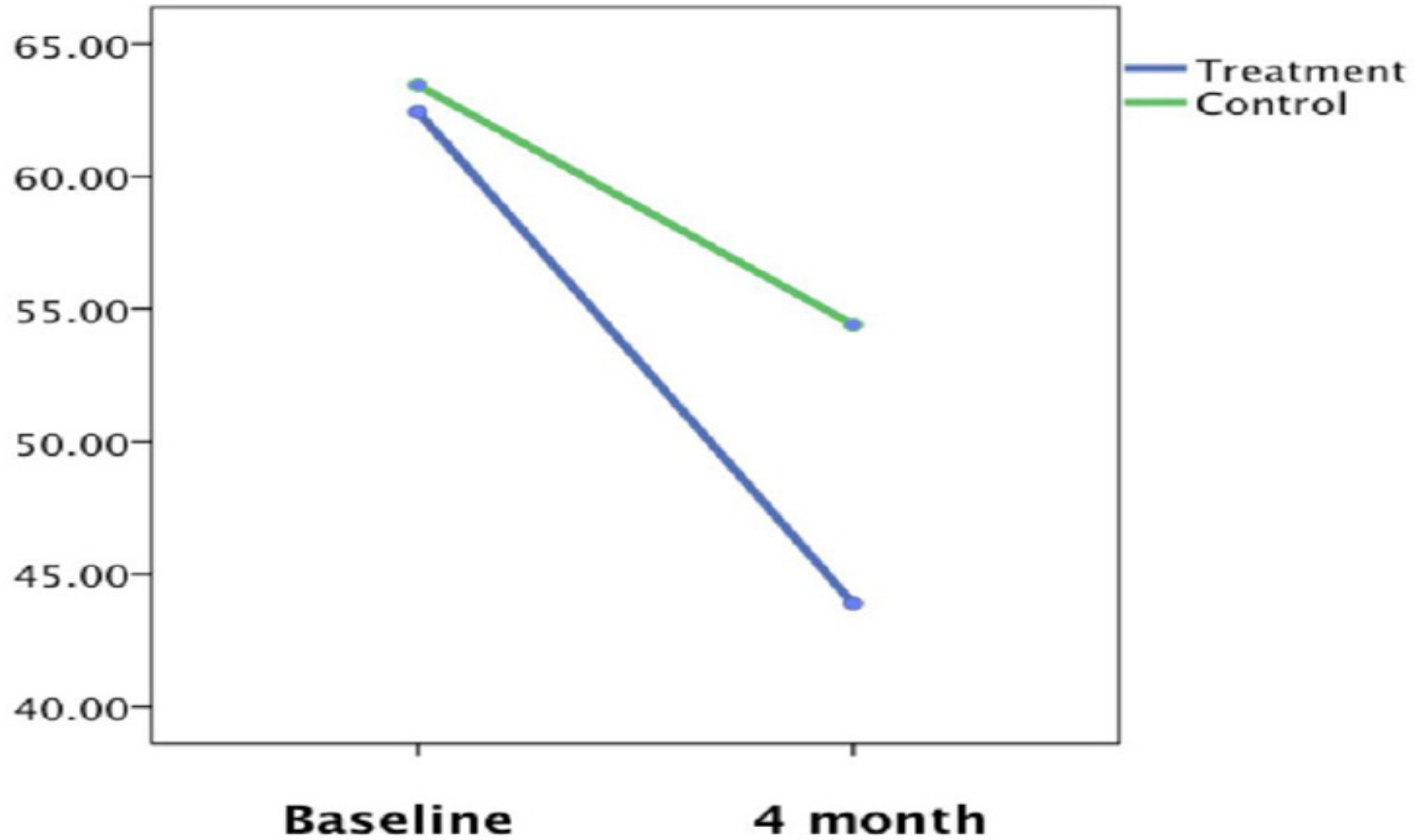
EF limitations  
can be  
addressed

GOOD NEWS!

# What is FAST?

- ▶ A manualized intervention based in the cognitive remediation literature
- ▶ CR refers to an intervention that “targets cognitive deficit using scientific principles of learning with the ultimate goal of improving functional outcomes” (McGurk et al., 2013)
  - ▶ Approaches vary in length, methods, and format
- ▶ Skill or strategy coaching focuses on teaching skills that can be used to improve cognitive performance **with the aim of reducing the impact of impairment and enhancing performance on real-world cognitive tasks**
- ▶ FAST is a modification of Beth Twamley’s CCT intervention for SE (Twamley et al., 2012)

# Group Comparisons: Self-Reported Educational Difficulties Educational Barriers Questionnaire, M. Mullen



# Importance of Individualized Skill Development

FAST is successful because it develops goal-directed behavior:

- Roots all support strategies into the student's current academic goals (semester and long-term)
- Explores what's getting in the way of achieving their goals
- Individualizes skill development approaches & strategies that are aligned with their articulated barriers
- Practitioner uses their language and how they describe their barriers



# What's In The Manual?

- ▶ Strategies that help students develop self-management skills to reduce barriers in school and enhance performance
- ▶ Develop skills and strategies to **compensate** for cognitive barriers
- ▶ Tools for them to boost efficiency...work smarter, not harder
- ▶ Skills for them to practice that can improve cognitive functioning

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**Session 2 – Prospective Memory (Calendars, Lists, Linking Tasks)**

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**Session 5 – Task Attention**

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**Session 7 – Verbal Learning and Memory**

**Session 8 – Verbal Learning and Memory/Note-taking**

**Session 9 – Cognitive Flexibility and Problem-Solving**

**Session 10 – Cognitive Flexibility and Problem-Solving**

**Session 11 – Cognitive Flexibility, Problem-Solving, and Planning**

**Session 12 – Skills Integration, Review, and Next Steps**

# Selected FAST Self-Management Skills & Strategies

- ▶ Goal setting
  - ▶ Identification of goals that relate to areas of cognitive difficulty
- ▶ To-do lists
- ▶ Task linking
- ▶ Eisenhower's Principle: urgent vs important
  - ▶ Focus on figuring how to to prioritize time and tasks
- ▶ Self-talk
- ▶ Calendaring:
  - ▶ the most important self-management skill
- ▶ Set Shifting vs Multi-Tasking
- ▶ Visualization
  - ▶ Encode- Store -Retrieve

# What are the skills with which students struggle?

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# The Eisenhower Principle

## Urgency/Importance

- ▶ Throughout the semester there are many tasks that students need to do in order to succeed.
- ▶ Some are important, some are urgent, some are both, and others are neither.
- ▶ Let's look at these terms a little more closely:
  - ▶ Important tasks are ones that are critical to the achievement of your goals
  - ▶ Urgent tasks are often critical to the achievement of someone else's goals

|  |   |  |
|--|---|--|
| <p style="text-align: center;"><b>More<br/>Important</b></p> | <p style="text-align: center;"><b>Q2</b><br/><u>Important Goals</u></p> <p><b>Examples:</b> Problem prevention,<br/>Long-term projects/assignments,<br/>Finding your career path.</p> | <p style="text-align: center;"><b>Q1</b><br/><u>Critical Activities</u></p> <p><b>Examples:</b> Deadline-driven tasks,<br/>crises, resolving immediate<br/>problems.</p> |
| <p style="text-align: center;"><b>Less<br/>Important</b></p> | <p style="text-align: center;"><b>Q3</b><br/><u>Distractions</u></p> <p><b>Examples:</b> Time wasters,<br/>surfing the net, chatting, etc.</p>  | <p style="text-align: center;"><b>Q4</b><br/><u>Interruptions</u></p> <p><b>Examples:</b> phone calls/<br/>emails/meetings/ reports, certain<br/>pressing matters.</p>   |
|  | <p style="text-align: center;"><b>Less Urgent</b></p>   | <p style="text-align: center;"><b>More Urgent</b></p>  |

# Activity: Determining How You Spend Your Time

- Meeting with a student who is applying for services.
- Beginning work on a large project due in six months.
- Catching up on facebook.
- Finishing an accommodation letter that is due at the end of the day.
- Re-organize your desk.
- Revising office policy/procedure to increase accessibility.
- Day to day follow up email responses to colleagues.
- Calling your family to let them know you're working late.
- Chatting with co-workers



**More  
Important**

**Important Goals**

- Beginning work on a large project due in six months.
- Revising office policy and procedures to increase accessibility.

**Critical Activities**

- Meeting with a student who is applying for services.
- Finishing an accommodation letter that is due at the end of the day.

**Less  
Important**

**Distractions**

- Catching up on facebook.
- Re-organize your desk.
- Chatting with co-workers

**Interruptions**

- Day to day follow up email responses to colleagues.
- Calling your family to let them know you're working late.

**Less Urgent**

**More Urgent**

# Summary

- ▶ Mental health conditions impact students in many ways
- ▶ Executive functioning issues cause trouble with planning, memory, reasoning
- ▶ Using targeted skill development we can compensate for these difficulties



For more information or collaboration,  
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