### **Executive Dysfunction**

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#### Definitions.1

- Executive function is the ability to integrate various component cognitive abilities to produce meaningful task performance.
- There are two broad areas of executive dysfunction:
  - Emotional-Behavioral / Self-Control
  - Metacognitive / Productive

### Definitions.2

- Emotional-Behavioral / Self-Control
  - Inhibit
  - Shift
  - Emotional Control
  - Self-Monitor

### Definitions.3

- Metacognitive / Productive
  - Initiation
  - Working Memory
  - Plan / Organize
  - Task Monitoring
  - Organization of Materials

#### Stage Model of Occupational Rehabilitation

Stage	Area Assessed	Measured by, or in terms of	Usual Hierarchy
8	Earning Capacity	Earned income over expected work-life.	RC, VE
7	Vocational Handicap	Ability to perform a particular job.	RC, VE, OT
6	Employability	Ability to become employed in the local labor market. RC, VE, OT	
5	Vocational Feasibility	Ability to perform fundamental work behaviors.  OT, VE	
4	Occupational Disability	Vocational, societal and familial consequences of functional limitations.	OT, VE, PT, SLP
3	Functional Limitation	Inability to perform component actions and tasks.  OT, PT, SLP, VE, NP	
2	Impairment	Loss or restriction of person component. MD, NP, OT, PT, SLP	
1	Pathology & Diagnosis	Imaging, laboratory studies, observed signs, reported symptoms.	MD, NP, SLP

## Whose professional territory?

- Neuropsychologists are limited by their highly-structured tools to evaluating impairment and component function.
- PTs focus on physical capacity; often limited by executive dysfunction, but not measured by their tests.
- OTs and SLPs and CVEs can focus on lessstructured occupational performance that is sensitive to executive dysfunction.

#### Stage Model of Occupational Rehabilitation

Stage	Area Assessed	Usual Hierarchy	Resources
8	Earning Capacity	RC, VE	DOL, Census, VALE
7	Vocational Handicap	RC, VE, OT	O*NET, DOT, JA
6	Employability	RC, VE, OT	EDD
5	Vocational Feasibility	OT, VE	WCE
4	Occupational Disability	OT, VE, PT, SLP	Work Simulation
3	Functional Limitation	OT, PT, SLP, VE, NP	FCE
2	Impairment	MD, NP, OT, PT, SLP	AMA Guides
1	Pathology & Diagnosis	MD, NP, SLP	Multiple

### Executive Function Screening

- Behavior Rating Inventory of Executive Function (BRIEF-A)
  - Self-Report
  - Informant-Report
- Ruff Neurobehavioral Inventory
  - Self-Report
- Use either to screen prior to evaluation.
  - BRIEF is quicker and easier to use.

# Executive Function Evaluation

- As an FCE morphs into WCE, work simulations become necessary.
- A combination of demand-structured work samples and less-structured situational assessments is optimal.
- Generic and Job-Specific work simulations are many clinics' next area of expansion.

## Generic Work Simulations

- Structured Work Activity Groups (SWAGs)
  - Washington University Program in OT
  - Feasibility Eval Checklist (FEC) to rate observations and readiness for employment.
- Progressive Occupational Demand (PODs)
  - EpicRehab
- SWAGs & FEC free at EpicRehab.com
- PODs videos at YouTube/EpicRehab

## Job-Specific Work Simulations

- Screen with SWAG or POD and identify readiness for JA-based work simulation.
- Use work samples provided by employer to populate this work simulation.
- First target is 2-hour scheduled activity.
- Increment hourly to full 8-hour schedule.
- Use FEC and peer-review to rate readiness to RTW.

### Conclusion

- Executive dysfunction is much more often disabling than functional limitations due to a specific cognitive information-processing component.
- Work simulation is the only way to identify and improve executive dysfunction limitations.