

# EXECUTIVE CONTROL



# *Executive Control*

- Set-shifting
- Sequencing
- Conflict monitoring
- Conflict resolution
- Meta-cognition
- Planning

# Three Constructs

1. Rule Generation and Selection

2. Scheduling and Sequencing

3. Dynamic Adjustments in Control



# Three Constructs

1. Rule Generation and Selection (i.e., goal maintenance and biased competition)
2. Scheduling and Sequencing (e.g., planning)
3. Dynamic Adjustments in Control (i.e., conflict and performance monitoring)

# Recommended for measurement development

## Construct: Rule Generation and Selection

### Rationale: Strengths

Ranked highly on all criteria

### Rationale: Limitations

More work needed to disentangle from other domains

Associated with functional outcomes, but more evidence needed

# Recommended for measurement development

## Construct: Dynamic Adjustments in Control

### Rationale: Strengths

Linked to specific neural systems

Understanding of cognitive mechanisms

Evidence of impairment in schizophrenia

Readily measured in humans

Use in imaging

Some animals models

Some links to neuropsychopharm

### Rationale: Limitations

Unknown if related to functional outcomes

# More basic cognitive neuroscience research needed

## Construct: Scheduling and Sequencing

### Rationale: Strengths

Can be measured in humans, but some complexity

Some evidence of impairment in schizophrenia, not clear how strong

Some links to neural systems

Has been used in imaging

### Rationale: Limitations

Cognitive mechanisms unclear

Some animals models but no clear model

Limited links to neuropsychopharm

Unknown if associated with functional outcomes