
Build the Skills to Train Your Brain



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Learning Objectives

1. Define cognitive health and the role that supporting cognitive health plays in psychiatric rehabilitation
2. Provide strategies for discussing cognitive health with clients to identify cognitive skill strengths and areas that, if strengthened, could help individuals better engage in activities they value
3. Present empirically-supported methods of skills training to improve cognition
4. Discuss factors that impact engagement in cognitive intervention and potential strategies to facilitate motivation and cognitive learning.

Rehabilitation and Recovery

Most people want a comfortable home, an education, rewarding work, an engaging social life and enjoyable leisure activities

- What do our interventions target?
- Do they get at the right “stuff”?



Cognitive Health

The brain's ability to support thinking, learning, remembering and the other cognitive skills needed to perceive, acquire, understand and respond to information

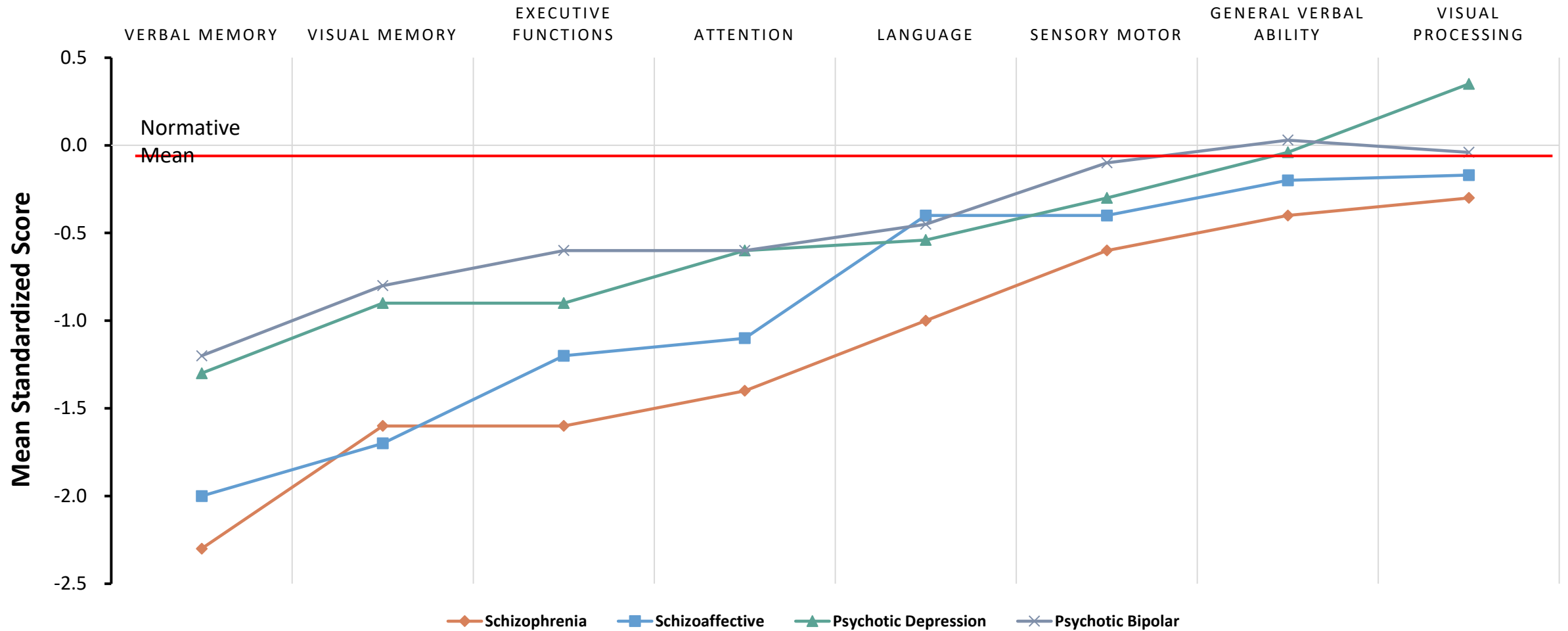




When cognitive health is poor:

- Vocational struggles
- Social isolation
- Educational difficulty
- Daily living struggles
- Poor wellness management

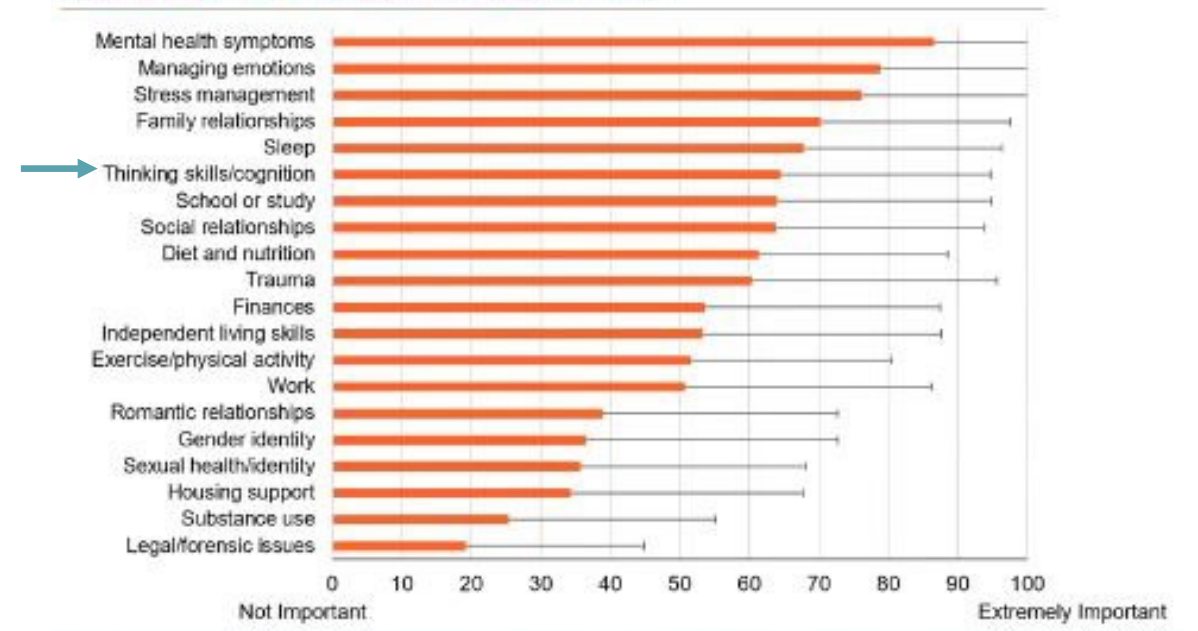
Neurocognitive Test Performance in People Diagnosed with Psychotic Disorders



Consumer Perspective

Subjective treatment targets	% of patients who felt that treatment was:	
	Urgently needed	Wanted
Low self-esteem	25	20
Lack of drive	16	30
Depression	18	20
Social anxiety	11	29
Memory/attention problems	11	26
Loneliness	15	15
Lack of clear thinking	6	22
Obsessions	6	12
Feeling persecuted	5	11
Delusional ideation	5	10
Voice hearing	3	17
Compulsions	4	4
Grandiosity	1	4

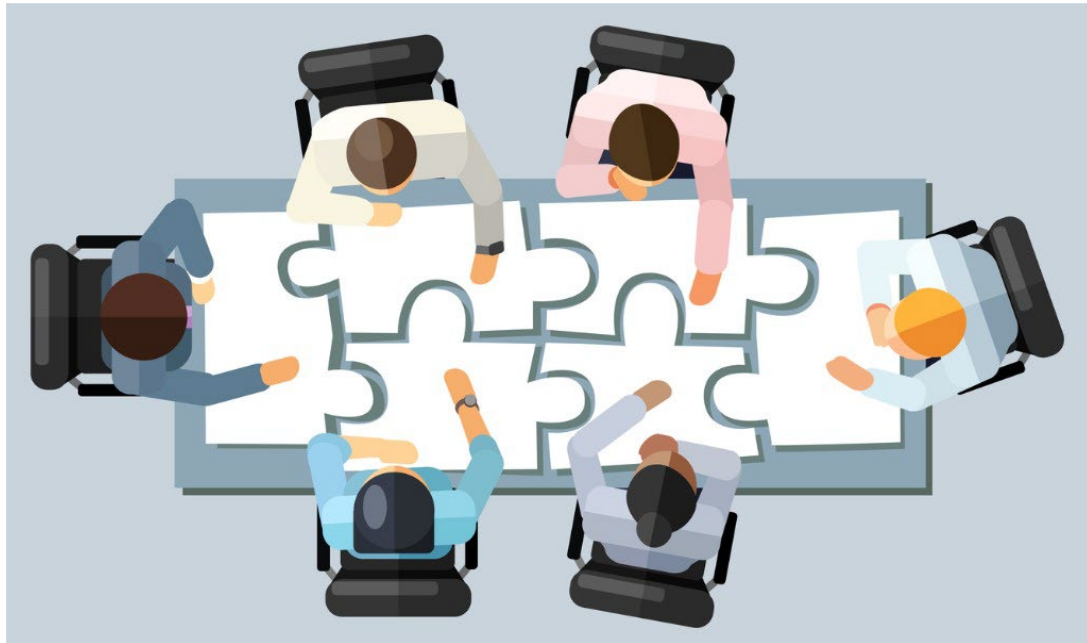
AREAS OF LIFE NEEDING SUPPORT



Moritz S, et al. *Eur Arch Psychiatry Clin Neurosci* 2017;267:335–339.

Allott, K et al. 2022

We Address Cognition to Enable Recovery



Building cognitive skills supports:

- Autonomy
- Perceived competency
- Engagement in activities that are valued
- Engagement with the community in ways that are personally meaningful

Interventions to address cognitive health works in tandem with other recovery-oriented interventions

Discussing Cognitive Health

Do you talk about cognitive health with the participants you work with?

How so?

What kinds of reactions do participants have to discussing cognitive health?

Tips for Talking About Cognitive Health

1 Connect cognitive health to personal goals and how it plays a role in everyday life

- “What is it you hope to accomplish in the next few months? Do you think that improving your attention, memory or other cognitive skills will help you do that?”
- “Would learning new organizational strategies be useful for you at your job?”
- “Would it be helpful to be able to focus better when talking to your friends?”

Tips for Talking About Cognitive Health

2 Use the participant's own language – avoid jargon

- “You mentioned feeling overwhelmed when the conversation moved fast” vs “you mentioned having slow information processing speed”

3 Use a strengths-based approach – avoid a deficit focus

- “Would it be helpful to be more organized?” vs “do you feel like you have problems being very disorganized?”

Tips for Talking About Cognitive Health

4 Be mindful of an individual's learning style

- “Do you prefer getting written information or having it explained aloud?”

5 Model skills and strategies

- Normalize strategy use
- Show vs tell

6 Supporting cognitive health also supports individuals' autonomy and confidence

- Decision making
- Independence

Cognitive Remediation

CR is an evidence-based, recovery-oriented behavioral intervention which aims to durably improve cognitive processes with the ultimate goal of enhancing daily functioning

Consistent with scientific principles

- Goal is to strengthen current cognitive skills
- Informed by research on neuroplasticity, learning and motivation

Consistent with recovery principles

- Goal to maintain an ongoing sense of purpose, and the abilities to function independently, to permit functional recovery
- We are treating the person - not the brain

Four Key Components of Evidence-Based CR



Involvement of a trained therapist



Guided practice of targeted cognitive exercises



Attention to the development of cognitive strategies

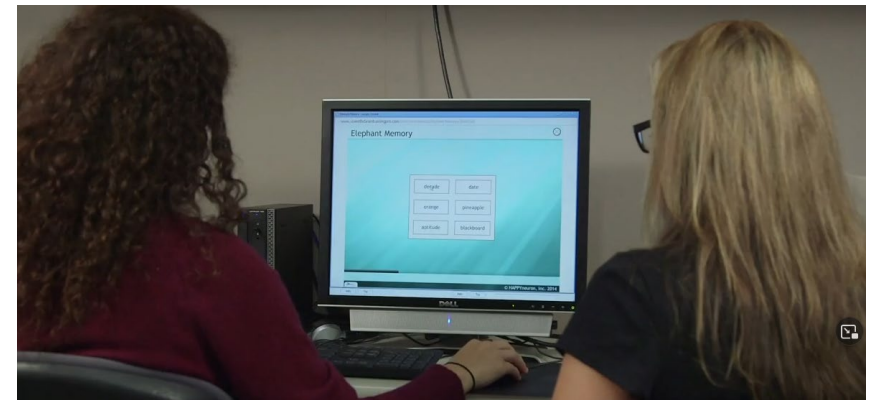
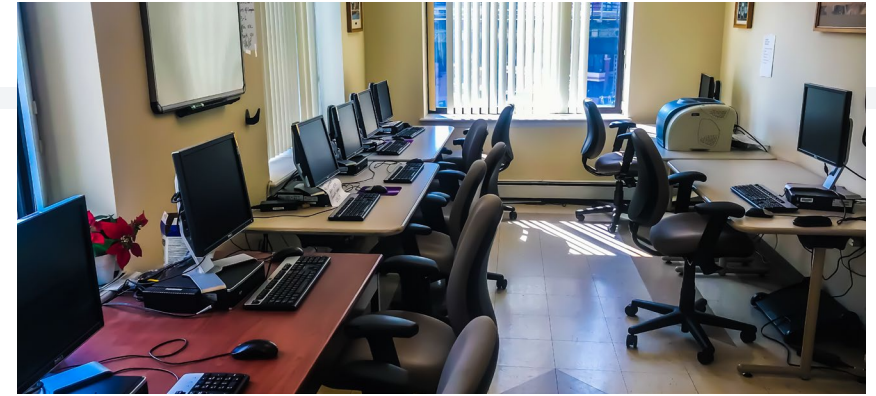


Procedures to facilitate transfer of cognitive gains to everyday functioning

Bowie CR et al., *Schizophrenia Research*. 2020 Jan;215:49-53.

Treatment Format

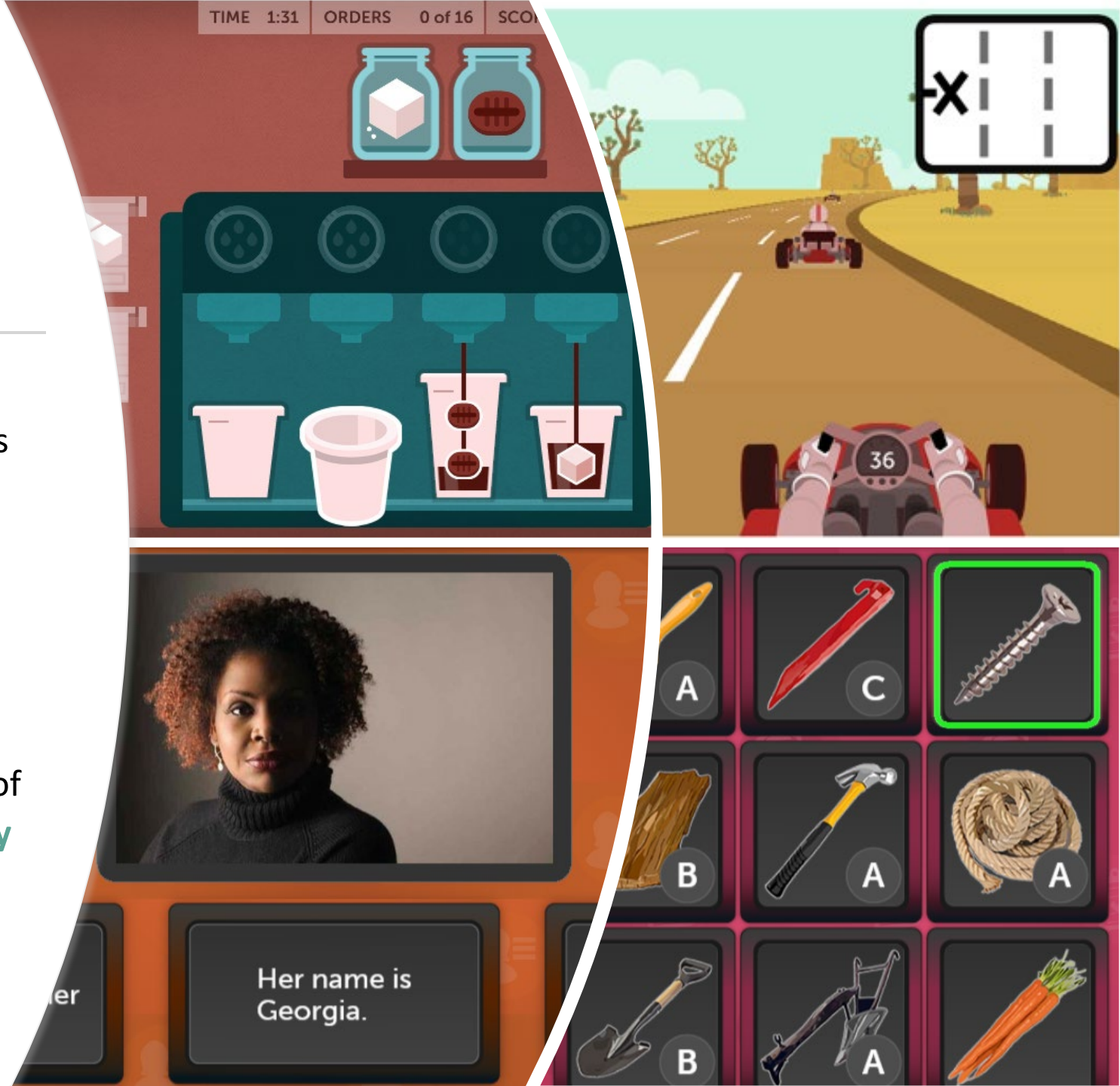
- ✓ Twice weekly sessions are conducted by a trained mental health professional in small groups (60-120 min each)
- ✓ Participants are led through game-like exercises that practice skills (perception, speed, memory, attention, reasoning, problem solving)
- ✓ The therapist demonstrates, provides feedback, coaches and supports
- ✓ The group discusses cognitive skills, information processing strategies and compensatory (work around) strategies and how they apply to real-world situations



Neuroplasticity-Based Exercises

An exercise menu is designed to meet an individual's cognitive health and learning needs

- Within each session, each exercise is practiced for sufficient duration to provide **repeated exposure** to task stimuli
- Across sessions, exercises are repeated to provide sufficient **opportunity for learning and mastery**
- Exercise difficulty changes to suit the level of a participant's performance to **continuously challenge and maximize engagement**



Optimizing Learning Through Engagement

CR is a *learning-based* intervention and employs techniques from educational psychology and motivation science to foster *intrinsic motivation*

- **Personalization:** Exercises are selected using shared decision-making to address a participant's particular cognitive health needs, interests and learning goals
- **Contextualization:** cognitive exercises depict contexts that make the practical utility and link to everyday life activities obvious
- **Choice:** Learner control within the session – selecting from a menu of exercises - fosters self-determination, self-regulation, and independence
- **Value:** Activities that are experienced as enjoyable and perceived as useful for meeting goals support engagement

Intrinsic Motivation is important for engagement, task initiation, task persistence, and cognitive learning gains

Medalia, A & Saperstein, AM. *Schizophrenia Bulletin*. 2011;37(2):S122-S128.

Critical Role of the CR Therapist

Therapist guidance during cognitive exercises offers a supportive context for practicing and applying new skills and strategies

- **Partner** with participants to achieve task goals, model skill use
- **Reflect** observations of task approach
- **Prompt** reflection on strategies and use of feedback to guide task approach
- **Reinforce** effort (the learning process > outcome)
- **Teach** new strategies to facilitate task success

Helping people with believe that their actions can lead to positive outcomes can motivate individuals towards the initiation of and persistence on goal-oriented tasks, whether in the context of treatment or in applying learned skills in daily life

See handout: Key Implementation Points

Medalia, A, Herlands, T., Saperstein, A., Revheim, N. (2018). *Cognitive Remediation for Psychological Disorders*. New York: Oxford University Press

Optimizing Generalization

Two techniques play a role in promoting the application of skills learned to daily life.

1. Bridging Groups

- Following computer-based activities
- Participants discuss cognitive skills and strategies in relation to common recovery goals and daily life
 - Metacognitive processing (thinking about your thinking)
 - Information processing skills (e.g., verbal mediation, chunking, associations)
 - Compensatory strategies (e.g., note taking, calendar use, prioritization, pro-motivation)
 - Role plays and skill applications (e.g., paying attention in conversations, problem-solving)
- Peer support

2. Pairing CR with Psychosocial Interventions and Programs

- Opportunities to reinforce skill learning and use
- Integration of cognitive health goals with recovery service planning

Summary

1. Cognitive health is critical for daily functioning and quality of life
2. Cognitive health can be discussed with participants using a recovery-oriented and strengths-based approach
3. Cognitive Remediation is an evidence-based practice that builds cognitive skills and using specific techniques, can promote self-confidence in one's ability to learn and to apply one's skills to pursue valued activities and goals
4. The CR therapist plays a central role
 1. CR personalization
 2. Supporting intrinsic motivation to learn
 3. Facilitating the transfer of cognitive skills to activities of daily living
 4. Conveying optimism about recovery

Resources

Books:

Cognitive Remediation for Psychological Disorders: Therapist Guide (Treatments That Work) 2nd Edition

Cognitive Remediation to Improve Functional Outcomes 1st Edition

Websites:

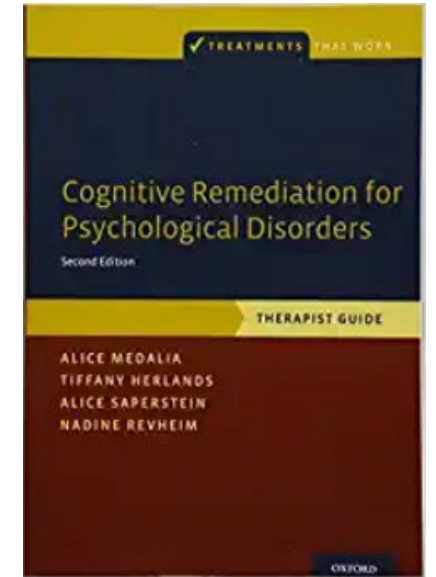
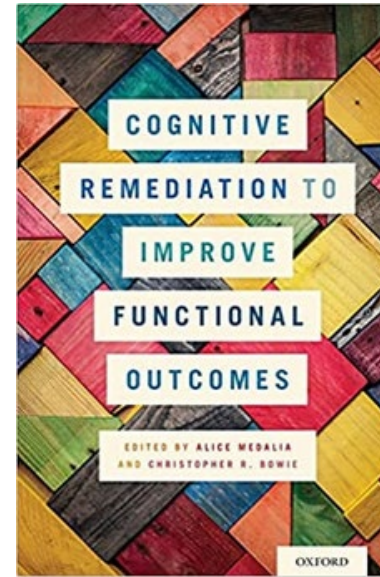
www.teachrecovery.com

www.cognitive-remediation.org

Handouts:

Key Implementation Points for Clinicians

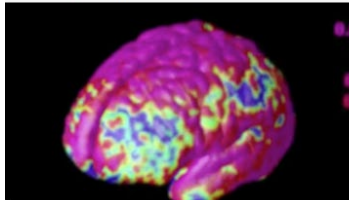
References



Courses

Course 1: Cognitive Dysfunction in People with Psychotic Disorders


13 Lessons | Free



Courses

Course 2: Cognitive Remediation for People with Psychiatric Disorders

9 Lessons | Free



Courses

Course 3: Executive Functioning Training and Motivation

13 Lessons | Free

