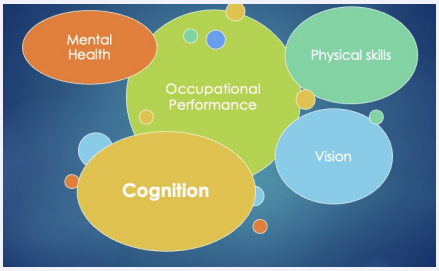
image



Cognitive Skills Screening and Assessments

Routinely used for **Cognitive Screening, Non-OT Specific**	Can be Used for **Cognitive Testing, OT Specific**
- Mini-Mental Status Examination (MMSE)	- Cognitive Assessment of Minnesota (CAM)
- Montreal Cognitive Assessment (MoCA)	- Lowenstein OT Cognitive Assessment (LOTCA)

Role of Occupational Therapy in cognition

Occupational therapists focus on **functional cognition**, or cognition that is necessary within the scope of **performing his/her roles**, daily occupations **within the contexts** performed.

Sponsored by **CrosswordCheats.com**
Learn to solve cryptic crosswords!
http://crosswordcheats.com

What are Cognitive Skills?

Foundational abilities that make up how we assess functional cognition

Attention

Memory

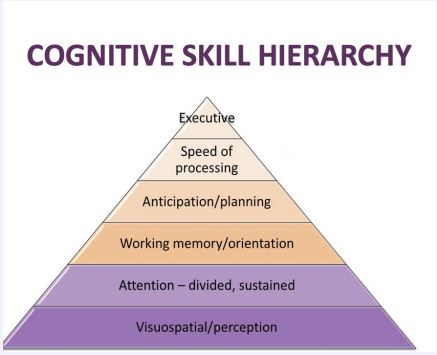
Problem Solving

Decision making

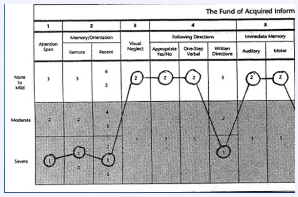
Judgement

Abstract Reasoning

Cognitive Skill Hierarchy



Scores on Testing



- Rate cognition mild-severely impaired

- % function impaired—Working Memory is 50% impaired

Sponsored by **CrosswordCheats.com**
Learn to solve cryptic crosswords!
http://crosswordcheats.com

Best Way to Improve Functional Cognition?

Remediation of Cognitive Skills

Functional-Based Approach

Functional Cognition

The interaction of cognitive skills, self-care and community living skills.

Refers to the thinking and processing skills needed to accomplish complex everyday tasks.

Where do I begin?

LOW	MED	HIGH
Micro-screens	Cognition Screenings	High-level impairment screen
Basic ADLs	Basic IADLs (EFPT & PASS	Complex IADLs (MET & WPCA
Behavior Ratings (self-report and observation)	Awareness Questionnaires/Assessments	Participation Measures (Roles Checklist)

Tests Chosen are Environment Specific

Learn the scales used in your environment.

Assess the:

- Specificity for OT
- Generalization of scale to function
- Suitability for goal writing

If something else needed, implement!!!

Cognitive Skills Screening and Assessments

Routinely used for **Cognitive Screening, Non-OT Specific**	Can be Used for **Cognitive Testing, OT Specific**
- Mini-Mental Status Examination (MMSE)	- Cognitive Assessment of Minnesota (CAM)
- Montreal Cognitive Assessment (MoCA)	- Lowenstein OT Cognitive Assessment (LOTCA)

Cognitive Skill Remediation Intervention

The **primary aim** of cognitive remediation therapy is **to reduce cognitive deficits.** “Brain Training”

Secondary aim is an **indirect positive impact on functional deficits** affecting everyday life. “TRAIN AND HOPE”

- Formal or informal computer-based programs
- Table-top cognitive activities
- Formal programs, “Attention Process Training”

(neuroplastic approach)

Cognitive Retraining or Cognitive Remediation

Systematic practice in activities or exercises that are designed to improve the underlying cognitive skills or impairments

Computer-based cognitive remedial programs

Virtual reality and simultaneous to enhance cognitive performance

Table top or paper/pencil exercises or worksheets

Sponsored by **CrosswordCheats.com**
Learn to solve cryptic crosswords!
http://crosswordcheats.com

Brain Plasticity

Brain Plasticity Finding Supports Practice of Focused Skills

Experience and practice have been found to change the organization and structural connectivity of the cerebral cortex…

Experience dependent changes can occur at multiple levels of the CNS synaptic level, changes in cortical maps and large scale neural networks

Neural plasticity mechanisms are enhance by…

Exposure to novelty

Repetition

Cognitive challenge

Active engagement (salience)

Computerized Cog Rehab

Focused training on specific impairment

Intensity, repetition, and consistent practice

Requires adaptive features (trains at the edge of ability – just right challenge!)

Novel & variability

Active engagement & motivation

Feedback is immediate via scores and time

May be combined with self-awareness strategies using coaching methods to connect to “everyday life”

Sponsored by **CrosswordCheats.com**
Learn to solve cryptic crosswords!
http://crosswordcheats.com

How Do We Assess In a Function-Based Approach?

Functional Cognition

- Skilled Observation
- Standardized Test of Observed Performance

Skilled Observation

To measure functional cognition, we need to OBSERVE functional performance during a task.

How do cognitive strength's support Dave's occupational performance in the kitchen?

Standard Testing of Observed Performance

Performance Assessment of Self-Care Skills (PASS)

Executive Function Performance Test

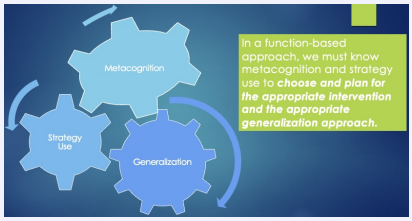
Complex Work Skills

Contextual Memory Test

Weekly Calendar Planning Test

(OT specific)

Function-Based Approach



Concepts for a Function-Based Approach

Generalization (intended outcome of learning)	Transfer of learned information from one setting to another; hard for typical people, very hard for people post brain insult.		
Metacognition	Ability to evaluate the difficulty of the task based on your current abilities	Plan to use strategies to make your performance most efficient & effective,	Clients with cognitive deficits can not choose efficient strategies to match their current level of function
Cognitive Strategies	A type of cognitive support that helps you learn or function successfully.	Strategies can be chosen independe-ntly, with support/collaboration or by the treating OT.	Strategies are generally used across different settings and within different tasks.

Sponsored by **CrosswordCheats.com**
Learn to solve cryptic crosswords!
http://crosswordcheats.com

Principles to Enhance Generalization

Plan for generalization from the beginning of treatment.

- Client-centered goals and activities.
- Train with the discharge environment in mind.
- Select strategies that align with previous habits, routines and roles.
- When possible, vary environments of practice.

High dose practice and errorless OR errorful learning depending on severity/prognosis of insult.

Metacognition

Clients with cognitive deficits can not choose efficient strategies to match their current level of function

Metacognition requires Awareness of Self

You will not know or agree to use new strategies. Use of strategies requires understanding of shortcomings.

Poor awareness requires therapeutic focus on awareness in order to advance metacognition.

Improving metacognition

Pre-task estimation

Feedback (peer, video, self-based on task outcome

Check performance as going

Self-questioning

- Did I check my work as I went
- Did I follow my strategies for success

Advancing Metacognition for Strategy Use

Once you have greater awareness, you can draw in the use of strategies to more efficiently perform tasks.

Then have client evaluate their use of proper strategies (did they use them when they were supposed to, how were they reminded to).

Can they use their metacognitive strategies in a variety of environments & with different facilitators?

Toglia's View of Cognitive Dysfunction

Cognitive dysfunction is conceptualized in terms of deficiencies in **processing strategies and metacognitive strategies** rather than by deficits in specific cognitive skills.

Failures to use self-regulatory or metacognitive behaviors such as anticipating, monitoring, revising

Failures in prioritizing, sticking to relevant details, keeping track of personal schedules

Sponsored by **CrosswordCheats.com**
Learn to solve cryptic crosswords!
http://crosswordcheats.com