

# Addressing Functional Cognition in Mental Health

## Session 1: Cognitive Impairment and Influence on Performance

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October 3, 2023



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

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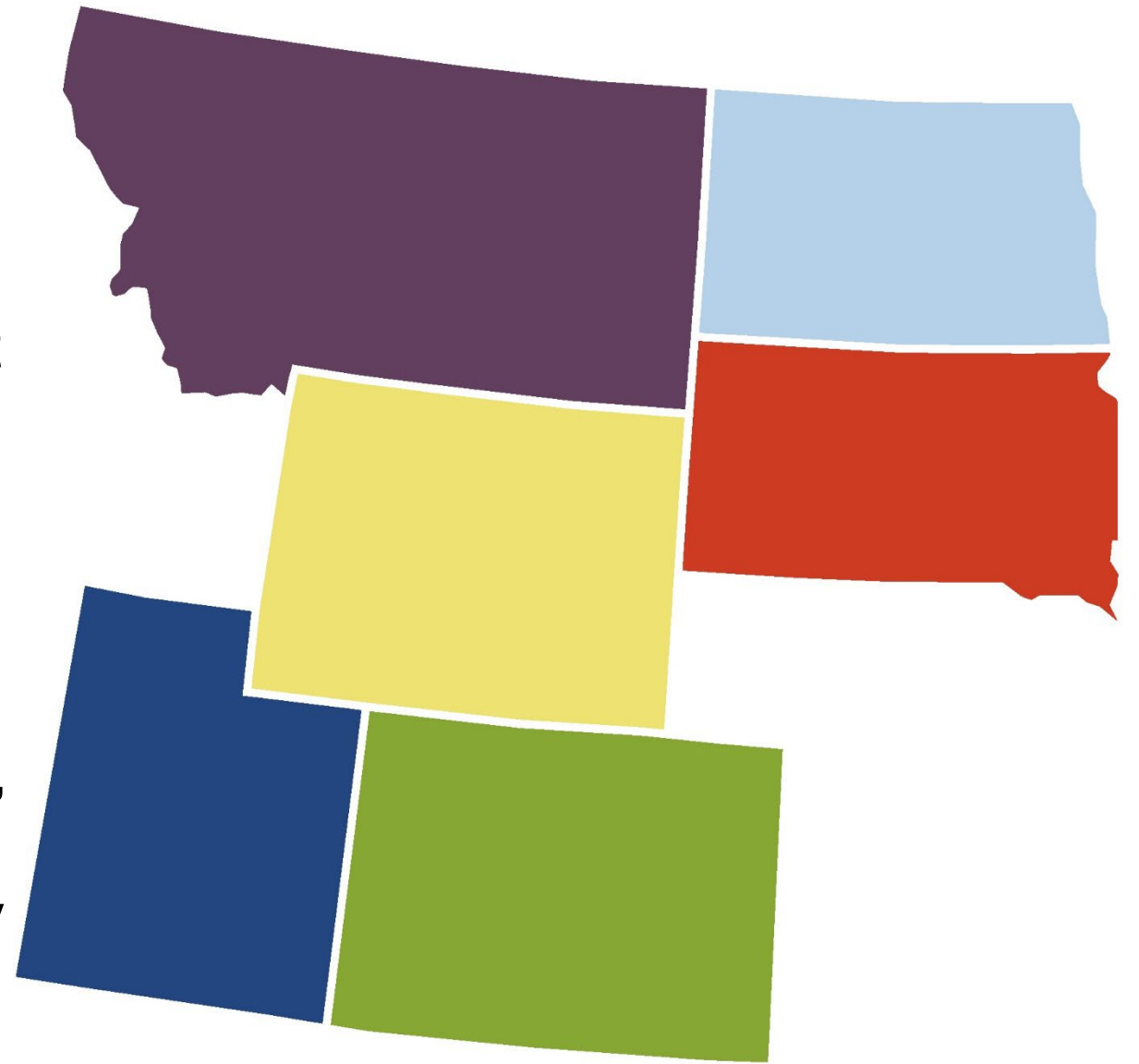
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# The Mountain Plains Mental Health Technology Transfer Center

The Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) provides training and technical assistance to individuals who serve persons with mental health concerns throughout Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming).

We belong to the Technology Transfer Center (TTC) Network, a national network of training and technical assistance centers serving the needs of mental health, substance use and prevention providers. The work of the TTC Network is under a cooperative agreement by the Substance Abuse and Mental Health Service Administration (SAMHSA).



# Land Acknowledgement Statement

Today, the University of North Dakota rests on the ancestral lands of the Pembina and Red Lake Bands of Ojibwe and the Dakota Oyate - presently existing as composite parts of the Red Lake, Turtle Mountain, White Earth Bands, and the Dakota Tribes of Minnesota and North Dakota. We acknowledge the people who resided here for generations and recognize that the spirit of the Ojibwe and Oyate people permeates this land. As a university community, we will continue to build upon our relations with the First Nations of the State of North Dakota - the Mandan, Hidatsa, and Arikara Nation, Sisseton-Wahpeton Oyate Nation, Spirit Lake Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa Indians.



The MHTTC Network uses affirming, respectful and recovery-oriented language in all activities. That language is:

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AND HOPEFUL

INCLUSIVE AND  
ACCEPTING OF  
DIVERSE CULTURES,  
GENDERS,  
PERSPECTIVES,  
AND EXPERIENCES

HEALING-CENTERED AND  
TRAUMA-RESPONSIVE

INVITING TO INDIVIDUALS  
PARTICIPATING IN THEIR  
OWN JOURNEYS

PERSON-FIRST AND  
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AVOIDING ASSUMPTIONS

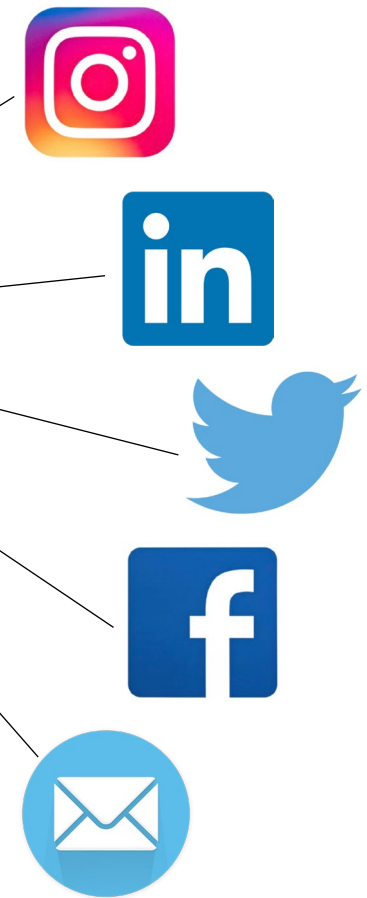
RESPECTFUL, CLEAR  
AND UNDERSTANDABLE

CONSISTENT WITH  
OUR ACTIONS,  
POLICIES, AND PRODUCTS

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# Session 1: Cognitive Impairment and Influence on Performance

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# Poll



# Objectives

1. Define cognition and functional cognition
2. Identify types of cognitive impairment associated with DSM-5 diagnoses
3. Identify examples of impacts on everyday participation and performance
4. Identify why addressing cognition is important

# Background

- Cognition and the International Classification of Functioning, Disability and Health
  - Health conditions
  - Everyday life activities
  - Executive functions (body function)

# Health and Well-Being

- Cognition overall is a predictor of outcomes of health and well-being
- Evaluation of cognition and influence on every life should be part of initial treatment planning

# Occupational Therapy

Occupational therapy is a science-driven, evidence-based profession that enables people of all ages to participate in daily living or live better with injury, illness, or disability. This is accomplished through designing strategies for everyday living and customizing environments to develop and maximize potential.

(AOTA, nd).

# Context

- Vocational rehabilitation
- Early psychosis programming
- School and university
- Forensic settings
- Supported housing complexes
- Group home
- Outpatient services
- Inpatient treatment

# Cognition

The mental process involved in knowing, learning and understanding as well as the way in which knowledge is implemented in everyday life

Acquiring, manipulating, storing and using information

Encompasses attention, perception, memory, language and executive functioning

# Attention

## Type

- Focused
- Sustained
- Selective
- Alternating
- Divided

## Application

- Being able to sit and start any task
- Reading a book
- Taking an order in a busy restaurant
- Cooking and setting the table
- Walking and using cellphone

# Memory

## Type

- Short-term
- Working
- Long-term

## Definition

- Holding information
- Manipulating stored information
- Recalling, such as for routines



# Executive Function

## **Skill**

- Working memory
- Inhibitory control
- Cognitive flexibility

## **Application**

- Calculating shopping costs
- Refraining from yelling
- Finding a new route

# Executive Function

## Hot

- Motivationally or emotionally significant
- Delayed gratification
- Value-based decision making

## Cool

- Neutral situations
- Working memory
- Problem solving and planning

# Type of Cognitive Impairment Associated with DSM-5 Diagnoses

REASONING  
COGNITIVE  
INHIBITION  
PROBLEMS  
FLEXIBILITY

INITIATION

MEMORY

PROBLEM-SOLVING  
EXECUTIVE  
FUNCTION  
ATTENTION AND  
CONCENTRATION  
PROBLEMS

DECISION-  
MAKING

Brown, 2019; Regev & Josman, 2020;  
Trager et al., 2017

# Functional Cognition

- Thinking and processing skills that are used to accomplish everyday activities in clinical and community living environments



# Client living with schizophrenia

- Common cognitive deficits
  - Initiation
  - Working memory
  - Processing speed
- Associated difficulties in everyday life
  - Maintaining pill box
  - Grocery shopping
  - Laundry
  - Use public transportation

# Client living with TBI

- Common cognitive deficits
  - Short-term and working memory
  - Problem solving
  - Cognitive flexibility
- Associated difficulties in everyday life
  - Paying bills
  - Cleaning up around the house
  - Poor social interactions
  - Managing accounts
  - Disinhibition impacting relationships

# Client living with autism and ADHD

- Common cognitive difficulties
  - Attention
  - Executive function
    - Problem solving
    - Transitioning
    - Cognitive flexibility
    - Inhibition
- Associated difficulties in everyday life
  - Keeping desk organized
  - Packing backpack
  - Completing work on time
  - Transitioning from task to task

# Poll



# Supporting Performance

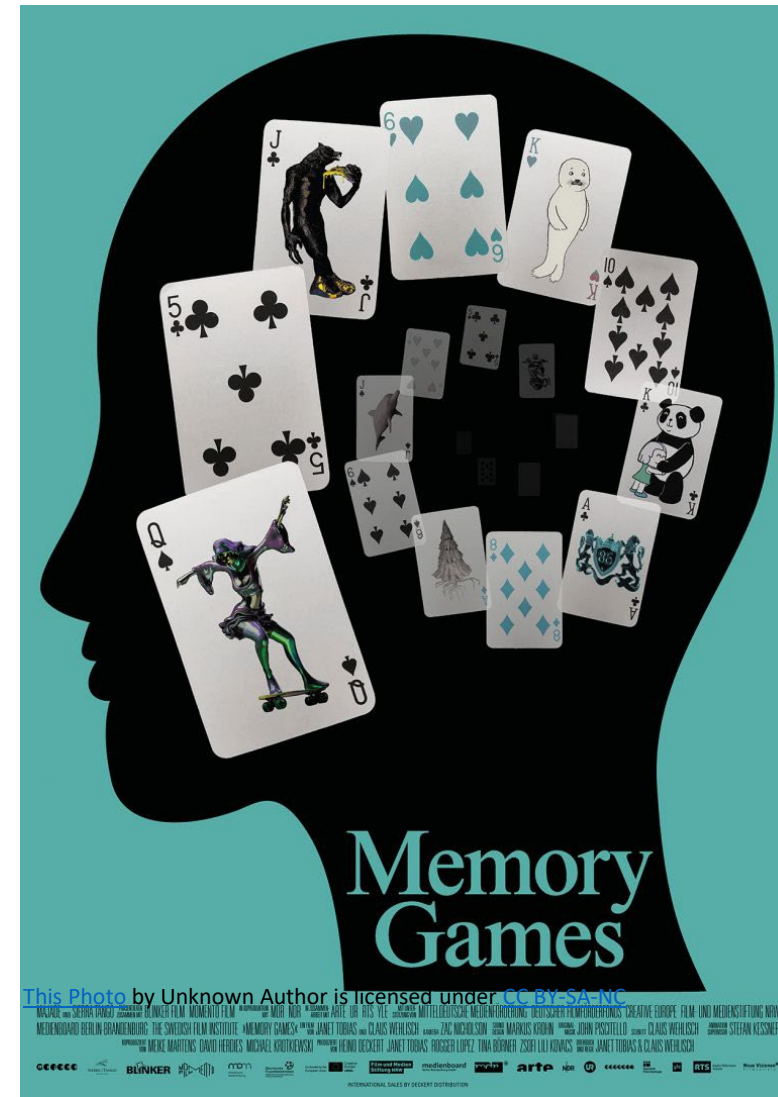


# Cognitive rehabilitation

- Aims to help individuals with various levels of cognitive impairment understand impairment and learn skills, apply compensation strategies, and modify the environment to live a better life.
- Two approaches, with the option to combine

# 1. Remedial

- Process oriented
- Direct retraining of impaired core cognitive skills



## 2. Functional or Adaptive Approach

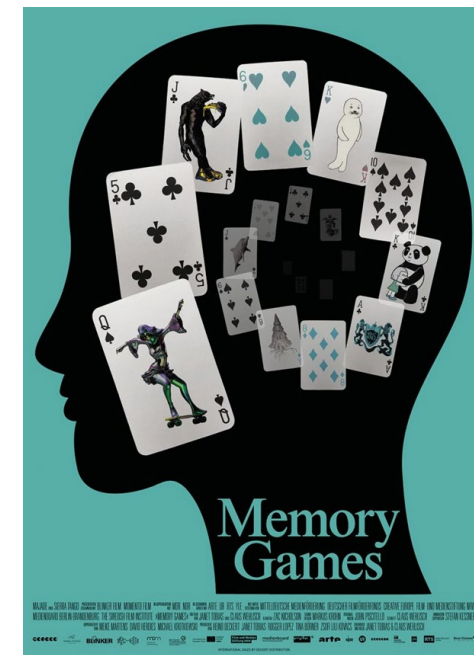
- Environmental adaptation
- Caregiver training
- Strategy training



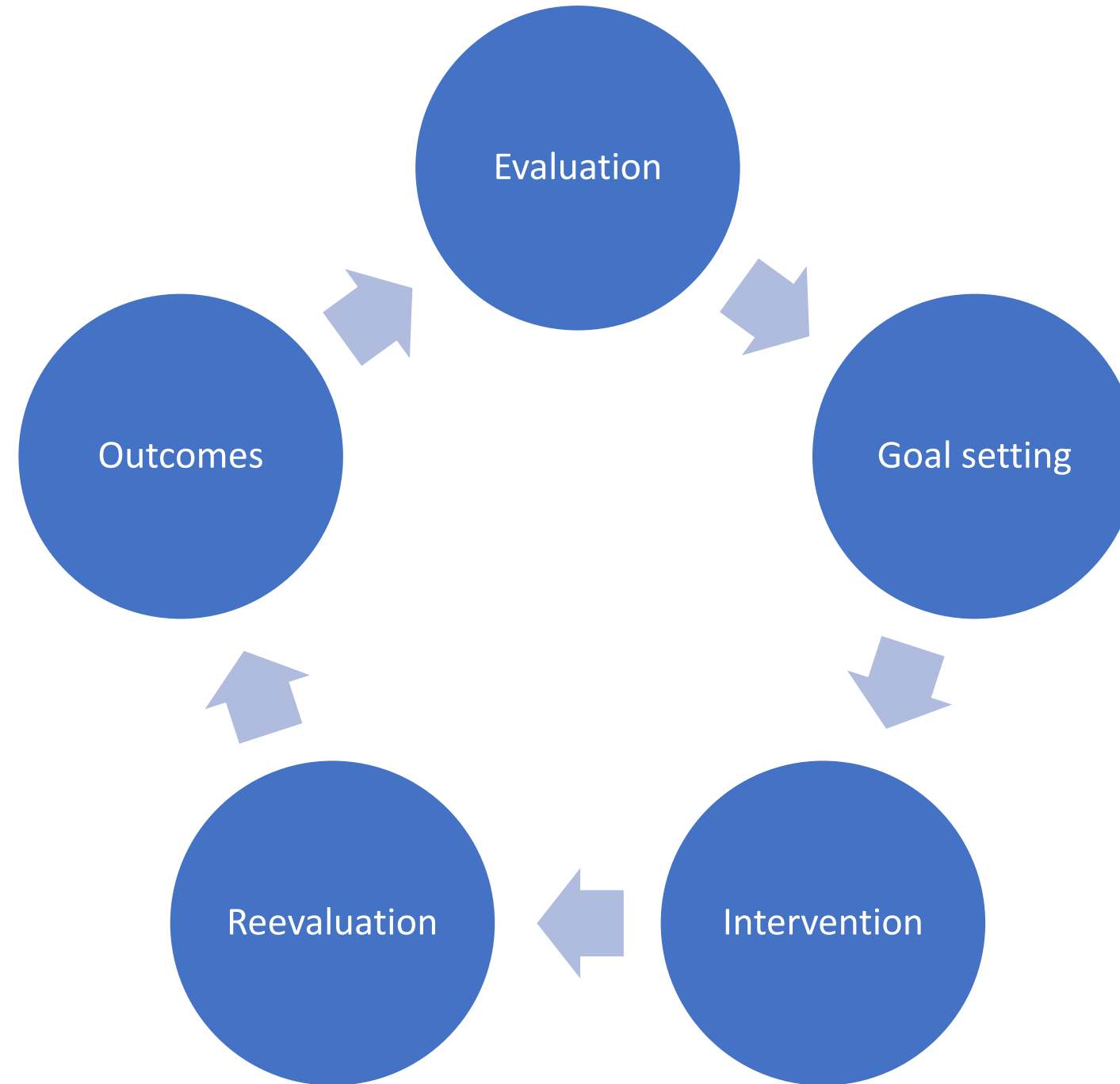
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# 3. Integrated Approach

- Remedial
- Functional



# Process



# What's next

- Session 2

- Evaluation

- Session 3

- Intervention

# Questions





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Acknowledgements

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