

# Overview of Brain Injury & Introduction to the Intersection of Addictions & Brain Injury

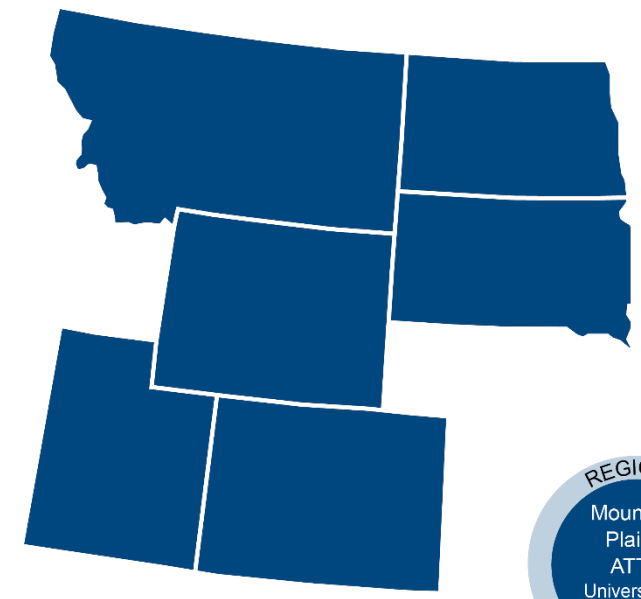
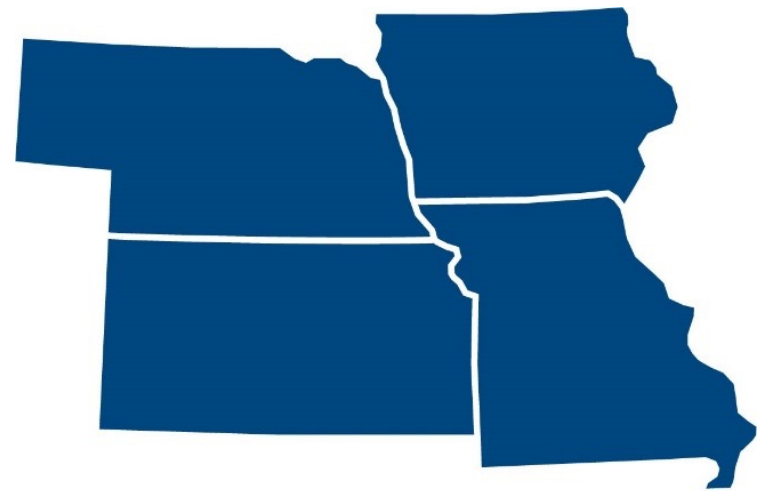
Judy Dettmer, Director of Strategic Partnerships

NASHIA

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# Mid-America ATTC & Mountain Plains ATTC

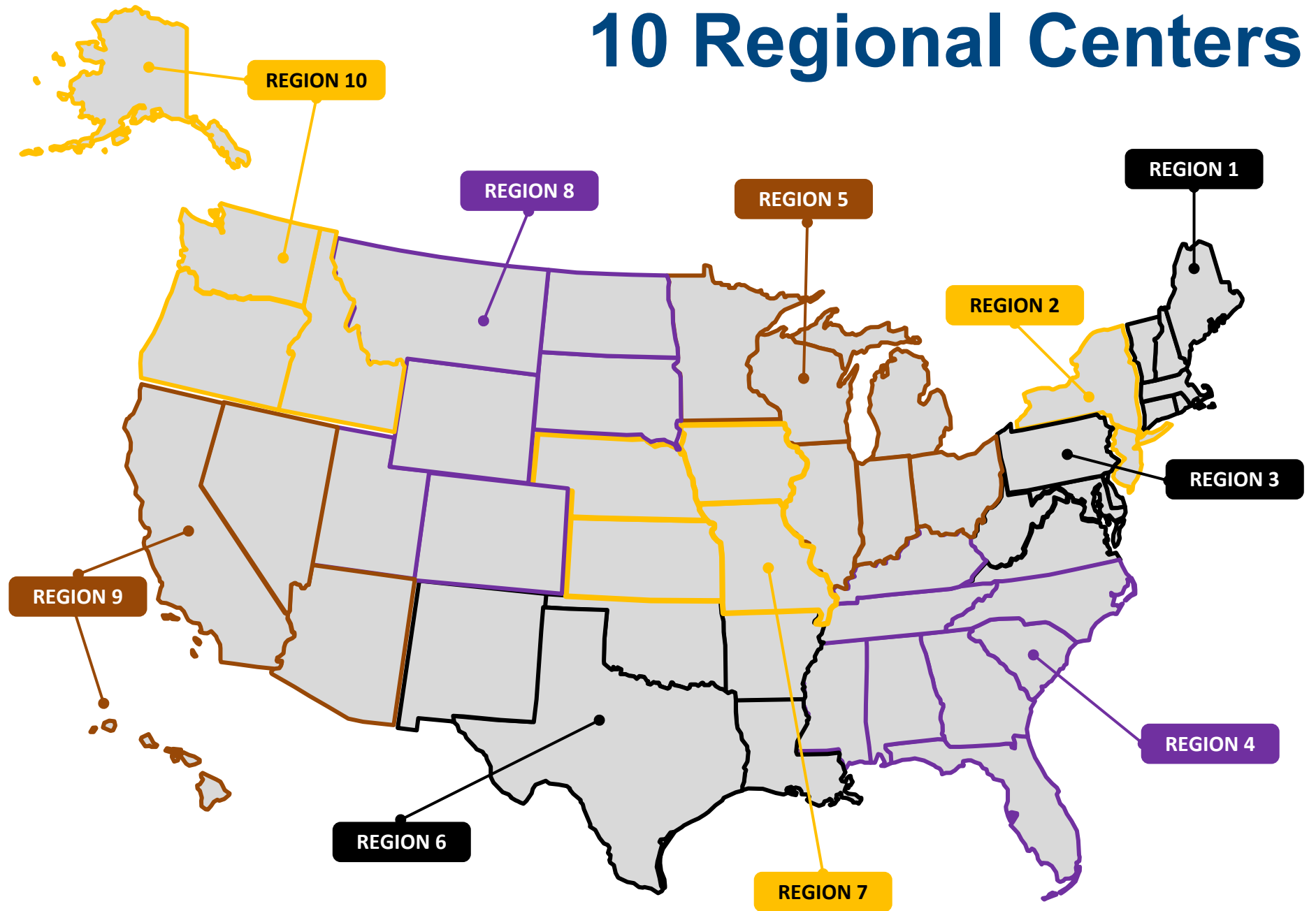


 Mid-America (HHS Region 7)  
**ATTC**  
Addiction Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

 Mountain Plains (HHS Region 8)  
**ATTC**  
Addiction Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

# HHS Regions

# 10 Regional Centers



# Disclosures

## Successful Completion

This live webinar offers 1.5 contact hours. To receive contact hours, participants must complete the activity in its entirety and complete the Evaluation/Request for Credit Form. CHES and NAADAC certificates as well as Certificates of Completion will be emailed within four to six weeks after submission of the Evaluation/Request for Credit form.

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# Accreditation Statements

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This course has been submitted to NAADAC for approval by the Addiction Technology Transfer Center (ATTC) Network Coordinating Office, as a NAADAC Approved Education Provider, for # 1.5 CE(s). NAADAC Provider #64973, Addiction Technology Transfer Center (ATTC) Network Coordinating Office, is responsible for all aspects of its programming.”

## Certified and Master Certified Health Education Specialists (CHES & MCHES)

Sponsored by the University of Missouri-Kansas City School of Nursing and Health Studies, a designated provider of continuing education contact hours (CECH) in health education by the National Commission for Health Education Credentialing, Inc. This webinar is designated for Certified Health Education Specialists (CHES) to receive up to 1.5 total Category I continuing education contact hours.

# Other CEs

- Iowa Board of Certification
- Missouri Credentialing Board
- Kansas Behavioral Sciences Regulatory Board
- Nebraska (deemed alcohol and drug specific – accepted for continuing education for licenses alcohol and drug counselors in NE)
- NASW
- CRC

# Disclaimer and Funding Statement

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The work of the Mid-America ATTC is supported by grant 1H79TI080208-01 the Mountain Plains ATTC is supported by grant TI080200\_01. Funded by the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

# Housekeeping Items

- All attendees are muted and attendees cannot share video during this session.
- Remember to ask questions using the Q&A feature
- How to access training materials

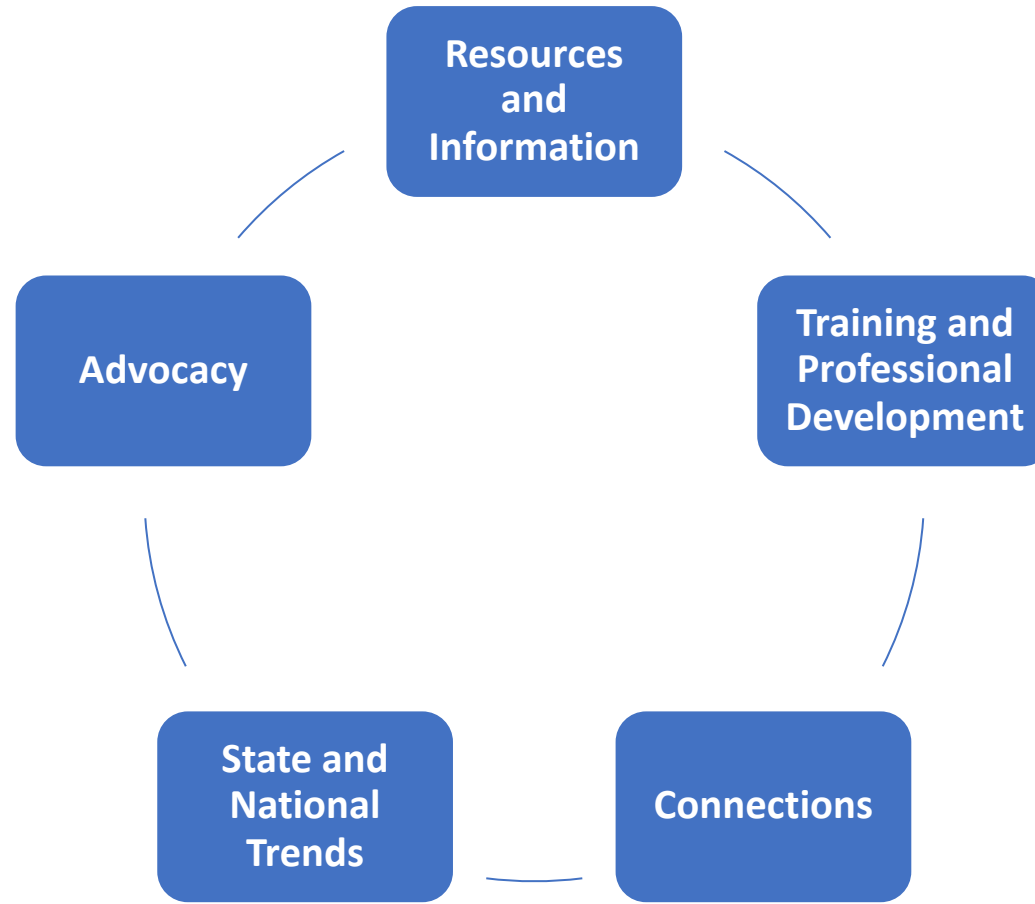


NASHIA is a nonprofit organization created to assist State government in promoting partnerships and building systems to meet the needs of individuals with brain injury and their families.



# NASHIA Provides

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# Learning Objectives

01

Participants will be able to describe the prevalence of brain injury in criminal & Juvenile Justice System.

02

Participants will learn about best practices for screening individuals for brain injury.

03

Participants will learn how to support individuals identified with brain injury.



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# Mental Health and Brain Injury

- [Almost half of adults](#) with TBI who have no pre-injury history of mental health problems [develop mental health problems after the TBI](#) (Gould, Ponsford, Johnston, & Schonberger, 2011. *Psychological Medicine*, 41, 2099-2109.)
- [1/3 of TBI survivors experience emotional problems](#) between 6 months and a year post injury
- Patients who reported:
  - Hopelessness 35%
  - Suicidal ideation 23%
  - Suicide attempts 18%
- [85% of survivor families](#) report that emotional or behavioral problems have an impact on their function  
Suicidal ideation can be [7x higher](#) in people with TBI than in those without
  - *Attempts* of suicide post-TBI can be at rates close to 17%
  - Increased suicide risk persists up to 15 years post-injury

(Fazel, et al. 2014. *JAMA Psychiatry*, 71(3), 326-33.; Mackelprang et al., 2014. *Am J Public Health*, 104(7), e100; Simpson & Tate, 2007. *Brain Inj.*, 21(13-14), 1335-51.)



# Substance Abuse and Brain Injury



*Why would TBI be associated with substance abuse disorders?*

1. Intoxication causes TBI
2. Early life TBI predispose to substance abuse
3. Structural damage from TBI changes behavioral control

# Substance Abuse and Brain Injury

Natural History of TBI to Age 25 from the Christchurch Birth Cohort (McKinlay, et al., 2008)

- Those hospitalized with 1st TBI before age 6
  - 3 times more likely to have a diagnosis of either alcohol or drug dependence by age 25
- Those hospitalized with 1st TBI between ages 16 and 21
  - 3 times more likely to be diagnosed with drug dependence
- TBI highly associated with likelihood of arrest



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# TBI & Criminal Justice: Prevalence

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A meta-analysis found the prevalence in the justice population to be 60.25% (Shiroma, Ferguson, & Pickelsimer, 2010) vs. 8.5% of the general population with reported history of TBI (Wald, Helgeson, & Langlois, 2008)

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Meta-analysis found prevalence of brain injury in juvenile justice system to be an average of 44% (Dijkers & Seger, submitted)

# TBI & Criminal Justice: Prevalence

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Individuals with brain injury report greater numbers of incarcerations than those without brain injury (Piccolino & Solberg, 2014)

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In a Colorado study, female offenders endorsed a history of TBI at a rate of 97%

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Rate of TBI is 3 to 8 times higher among juvenile offenders (Hughes et al., 2015)

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Half of youth offenders have a history of loss of consciousness, with repeat injuries being very common (Davies et al., 2012; Koba et al., 2013)



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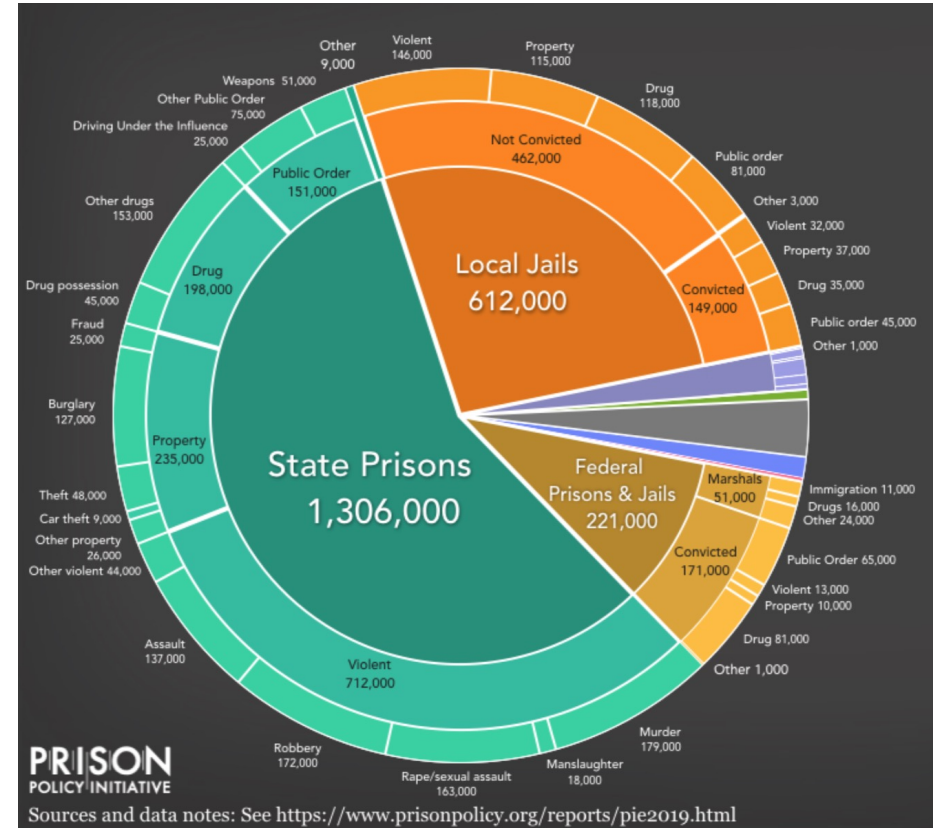
# Why it all Matters

## Report of history of TBI

- 50% of young males, 49% of young females in youth corrections
- 65% of males and 73% females in county jails
- 87% justice-involved adults over all

7 + million people under supervision

- = 3.78 million people living with brain injury in the justice system



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# TBI & Criminal Justice: Negative Outcomes

- Increased utilization of services while incarcerated (health and psychological)
- Lower treatment completion rates and higher rates of disciplinary incidents
- Lower ability to maintain rule-abiding behavior during incarceration
- More prior incarcerations
- Higher rates of recidivism, 69% compared to 37% of peers without TBI (Piccolino & Solberg, 2014)
- Criminal behavior can increase after TBI (especially severe TBI)
  - Farrer & Hedges, 2011; Brooks et al., 1986; Fazel et al., 2011; McIsaac et al., 2016; Timonen et al., 2002; Elbogen et al., 2015



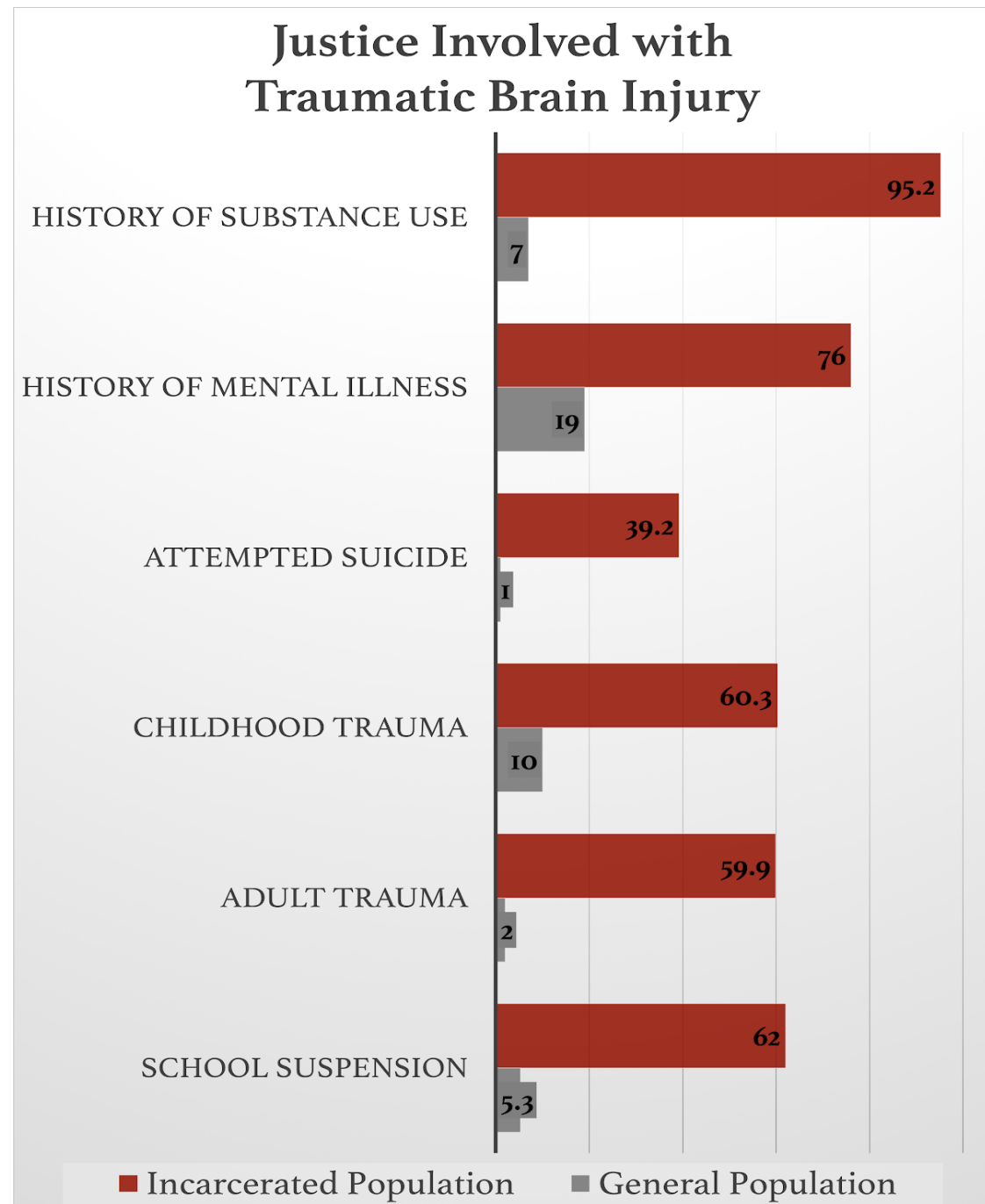
# TBI & Criminal Justice: Negative Outcomes

- Severe depression and anxiety
- Problematic anger
- Suicidal ideation and/or attempts
- Risk to personnel



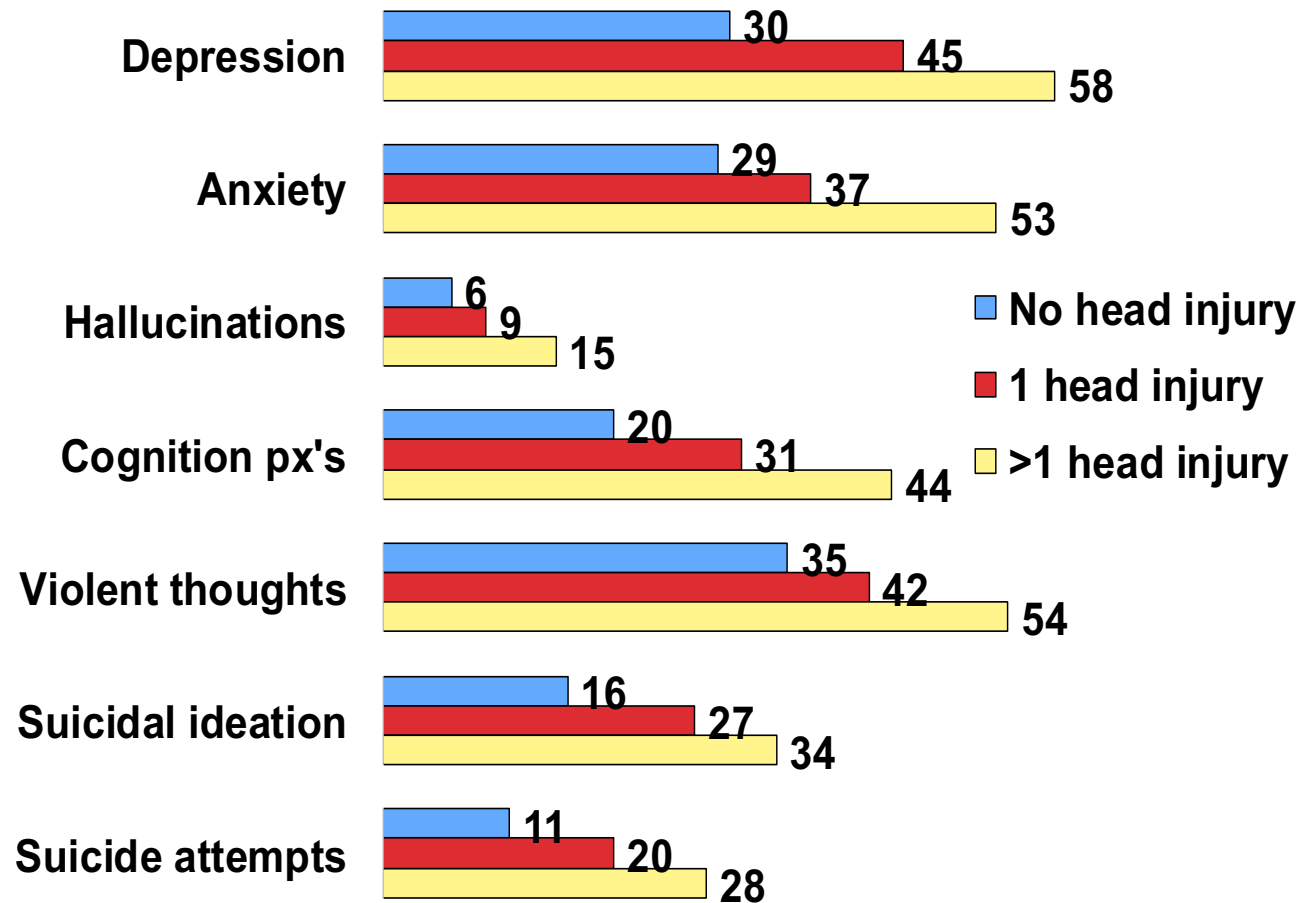
# Psycho-Social Vulnerabilities

Brain Injury and Criminal Justice Position Paper  
Colorado Evaluation and Action Lab grant, 2020





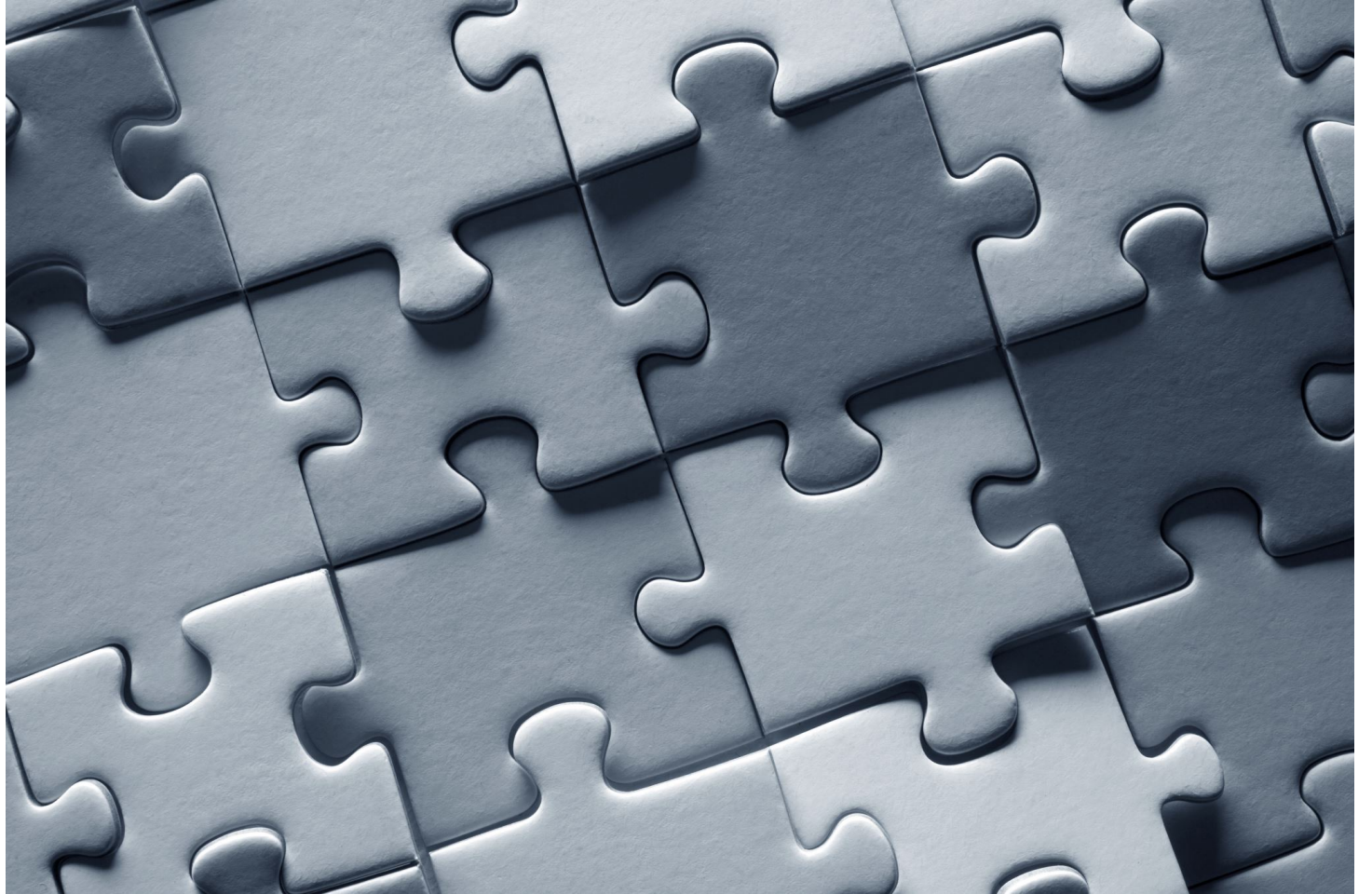
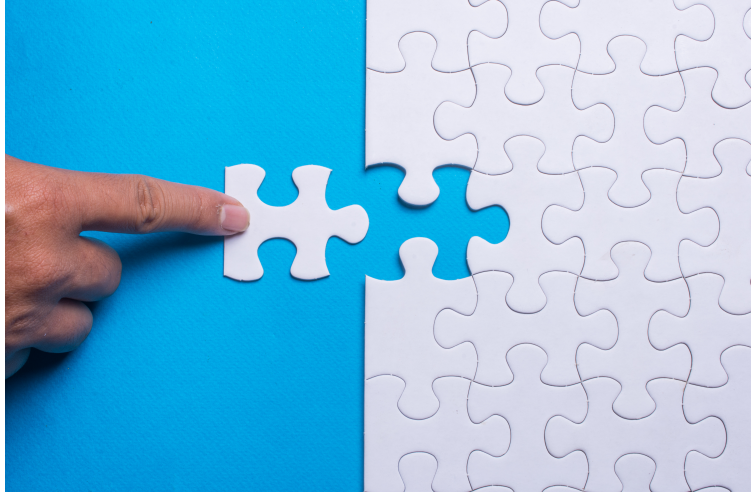
# Problems Worsen with Each New Injury



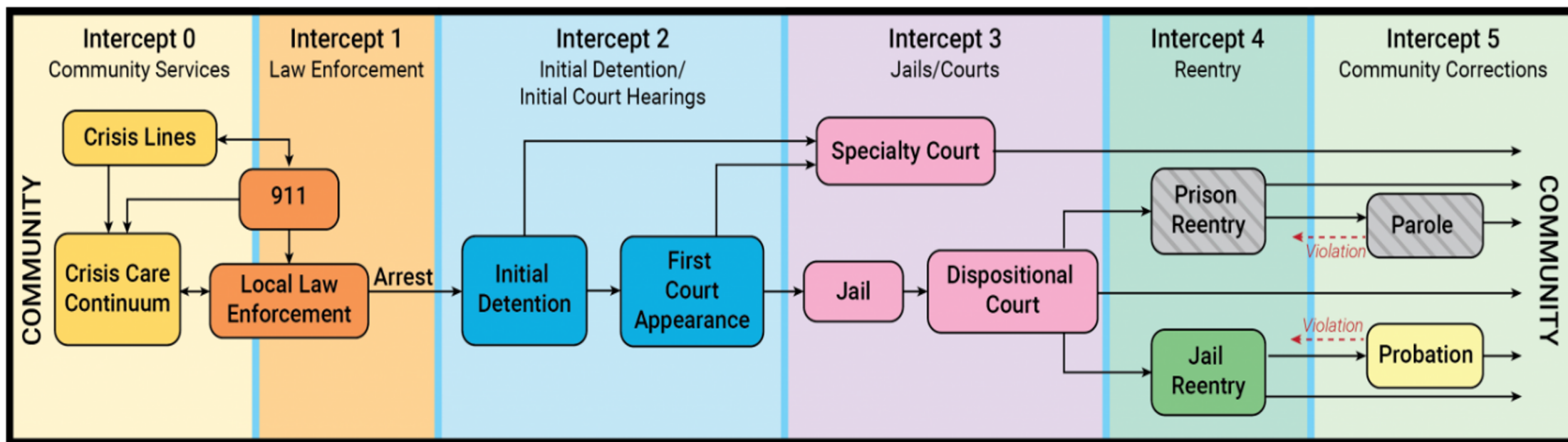
Behavioral Health  
Symptoms in Kentucky  
Prisoners  
(Walker, Hiller, Staton, &  
Leukefeld, 2003)

# Big Problem with Some Simple Solutions

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# Sequential Intercept Model (SIM)



Abreu, D., Parker, T. W., Noether, C. D., Steadman, H. J., & Case, B. (2017). Revising the paradigm for jail diversion for people with mental and substance use disorders: Intercept 0. *Behavioral Sciences & the Law*, 35(5-6), 380-395. <https://doi.org/10.1002/bsl.2300>  
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# Tangible Solutions

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01

Train on brain injury

02

Screen for brain injury

03

Screen for impairment

04

Adjust supports to address impairment

05

Refer to community supports



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# Importance of Screening (lifetime history)

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- The ***Commission on Safety and Abuse in America's Prisons*** was established in 2005 to identify and recommend solutions to the most serious challenges facing America's jails and prisons.
- 2006 report (<http://www.ojp.usdoj.gov/bjs/mhppji.htm> and <http://vera.org/project/commission-safety-and-abuse-americas-prisons>) recommend increased health screening, evaluation, and treatment for inmates as well as
  - Routine screening for TBI
  - Screening individuals with TBI for substance abuse and co-occurring mental health diagnoses
  - Education for personnel about how to manage and support individuals with TBI



# Importance of Screening (lifetime history)

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42% of persons who indicated they had incurred a TBI as defined by the CDC did not seek medical attention (Corrigan & Bogner, 2007)

Research indicates that a person's lifetime history of TBI is useful for judging current cognitive and emotional states, particularly behavior associated with the executive functioning of the frontal parts of the brain (e.g., planning, impulsivity, addiction, interpersonal abilities)

Brain injury increases risk for problem behaviors (Williams, Mewse, Tonks, Mills, Burgess & Cordan, 2010)



# Importance of Screening (lifetime history)

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- A person who has compromised functioning in the frontal areas of the brain:
  - Adapts less well in new or stressful situations
  - has greater problems following through
  - has more difficulty making lifestyle changes, especially when rewards are in the future
- Supports can be adapted for neurocognitive deficits. Examples:
  - Minimize environmental distractions
  - Educational therapies (e.g. CBT, DBT) should emphasize pacing, provide frequent opportunities for clients to respond, generate feedback, and provide reinforcement to maintain client engagement
  - Written material/handouts where possible
  - Repetition of key points
  - Non-electronic devices might include checklists, pictures or icons, photograph cues, post-it-notes, calendars, planners, and journals
  - Therapies should be introduced with a simple rationale



# Screening tools (lifetime history)

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- Tools are best if cost effective and easy to administer
- Best to use a valid tool
- Tools to consider include:
  - Ohio State University – Traumatic Brain Injury Identification Method
  - Traumatic Brain Injury Questionnaire
  - Brain Injury Screen Questionnaire
  - Brain Check Survey
- More information about these screens can be found at this link and by clicking on “Lifetime History Screening Tool”:  
[Lifetime history screening tool chart](#)



# Ohio State University TBI Identification Method — Interview Form

## Step 1

Ask questions 1-5 below. Record the cause of each reported injury and any details provided spontaneously in the chart at the bottom of this page. You do not need to ask further about loss of consciousness or other injury details during this step.

**I am going to ask you about injuries to your head or neck that you may have had anytime in your life.**

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.

No  Yes—Record cause in chart

2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle or ATV?

No  Yes—Record cause in chart

3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?

No  Yes—Record cause in chart

4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?

No  Yes—Record cause in chart

5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat- or training-related incidents.

No  Yes—Record cause in chart

**Interviewer instruction:**

If the answers to any of the above questions are "yes," go to Step 2. If the answers to all of the above questions are "no," then proceed to Step 3.

## Step 2

Interviewer instruction: If the answer is "yes" to any of the questions in Step 1 ask the following additional questions about each reported injury and add details to the chart below.

Were you knocked out or did you lose consciousness (LOC)?

If yes, how long?

If no, were you dazed or did you have a gap in your memory from the injury?

How old were you?

## Step 3

Interviewer instruction: Ask the following questions to help identify a history that may include multiple mild TBIs and complete the chart below.

Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)?

If yes, what was the typical or usual effect—were you knocked out (Loss of Consciousness - LOC)?

If no, were you dazed or did you have a gap in your memory from the injury?

What was the most severe effect from one of the times you had an impact to the head?

How old were you when these repeated injuries began? Ended?

Step 1 Cause	Step 2 Loss of consciousness (LOC)/knocked out				Dazed/Mem Gap		Age
	No LOC	< 30 min	30 min-24 hrs	> 24 hrs	Yes	No	

If more injuries with LOC: How many? \_\_\_\_\_ Longest knocked out? \_\_\_\_\_ How many ≥ 30 mins.? \_\_\_\_\_ Youngest age? \_\_\_\_\_

Step 3 Cause of repeated injury	Step 3 Typical Effect		Step 3 Most Severe Effect			Age		
	Dazed/ memory gap, no LOC	LOC	Dazed/ memory gap, no LOC	LOC < 30 min	LOC 30 min - 24 hrs.	LOC > 24 hrs.	Began	Ended

# Practice Case

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- Johnny
- Age 25
- Noted difficulties with follow through, attention, etc.
- Marked difficulties with obtaining employment



# Ohio State University TBI Identification Method — Interview Form

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No  Yes—Record cause in chart

2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle or ATV?

No  Yes—Record cause in chart

3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?

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Step 1 Cause	Step 2 Loss of consciousness (LOC)/knocked out				Dazed/Mem Gap		Age
	No LOC	< 30 min	30 min-24 hrs	> 24 hrs	Yes	No	
Car accident	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		22
Fight		<input checked="" type="checkbox"/>					14

If more injuries with LOC: How many? \_\_\_\_\_ Longest knocked out? \_\_\_\_\_ How many ≥ 30 mins.? \_\_\_\_\_ Youngest age? \_\_\_\_\_

Step 3 Cause of repeated injury	Step 3 Typical Effect		Step 3 Most Severe Effect			Age		
	Dazed/ memory gap, no LOC	LOC	Dazed/ memory gap, no LOC	LOC < 30 min	LOC 30 min - 24 hrs.	LOC > 24 hrs.	Began	Ended
Football 5-10 concussions	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			16 to 18	



# Interpreting Findings -- Johnny

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Determined positive if meet **ONE** or **MORE** of the following criteria:

- \* Worst: moderate/severe brain injury
- \* First: injury with loss of consciousness before age 15
- \* Multiple: 3 or more with altered mental status or 2 injuries within a 3-month period

NO

YES

YES



# Brain Check Survey

Colorado State University

Department of Occupational Therapy  
Life Outcomes after Brain Injury  
(LOBI) Research Program



Available for use at: [LOBI \(http://www.lobi.chhs.colostate.edu/index.aspx\)](http://www.lobi.chhs.colostate.edu/index.aspx)

To be filled out by the parent/guardian

## Student / Family Information

Today's Date: \_\_\_/\_\_\_/\_\_\_ Child's Name: \_\_\_\_\_ Child's Age: \_\_\_\_\_

Child's Date of Birth: \_\_\_/\_\_\_/\_\_\_ Child's Gender:  Male  Female

Please answer the following questions about **YOURSELF**:

Are you the student's (circle all that apply)?

Mother  Father  Foster Parent  Other (ex: stepmother) please describe: \_\_\_\_\_

Your Name (printed): \_\_\_\_\_ Your Signature: \_\_\_\_\_

Contact information: Email \_\_\_\_\_ Phone \_\_\_\_\_

## Injuries or Illnesses

Injury or Illness	Age	Outcomes
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Please check all that apply

<input type="checkbox"/> <b>Blow to Head</b> (From sports, playing, biking, falling, getting hit by an object, etc.)	At what age? _____	<p>Check all that apply:</p> <input type="checkbox"/> Concussion <input type="checkbox"/> Loss of consciousness, *for how long? _____ <input type="checkbox"/> Coma, *for how long? _____ <input type="checkbox"/> Confusion or altered mental state <input type="checkbox"/> Missed school <input type="checkbox"/> Resulted in no problem
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<input type="checkbox"/> <b>Whiplash</b>	At what age? _____	<p>Check all that apply:</p> <input type="checkbox"/> Loss of consciousness, *for how long? _____ <input type="checkbox"/> Coma, *for how long? _____ <input type="checkbox"/> Confusion or altered mental state <input type="checkbox"/> Missed school <input type="checkbox"/> Resulted in no problem
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## ***Behaviors that can affect learning***

Please tell us about your child's learning styles and behaviors:

Learning Style or Behavior	Circle the number on the scale which best describes your child:					
	(1) No Problem $\longleftrightarrow$ Extreme Problem (6)					
Coping with change or transitions	1	2	3	4	5	6
Maintaining family and friend relationships	1	2	3	4	5	6
Letting go of one activity to attend to another	1	2	3	4	5	6
Reaction to simple problems	1	2	3	4	5	6
Waiting for his or her turn in a game	1	2	3	4	5	6
Learns from past mistakes or behavior	1	2	3	4	5	6
Thinks before speaking or acting	1	2	3	4	5	6
Listens without interrupting others often	1	2	3	4	5	6
Handles a change in plans	1	2	3	4	5	6
Demonstrates good judgment	1	2	3	4	5	6

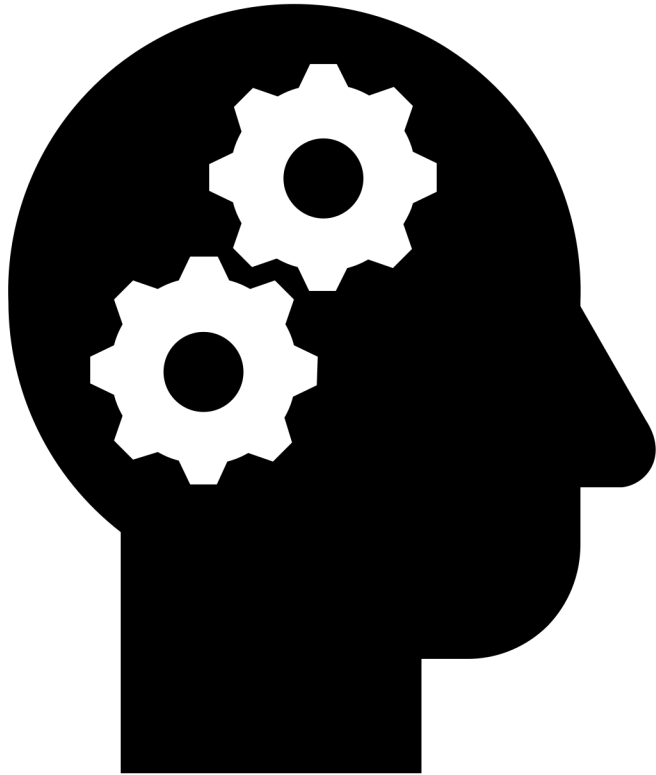
## ***Cognitive Processes that can affect learning***

Please tell us about your child's learning styles:

Learning Style or Cognitive Processes	Circle the number on the scale which best describes your child:					
	(1) No Problem $\longleftrightarrow$ Extreme Problem (6)					
Focusing and maintaining attention	1	2	3	4	5	6
Getting started on activities, tasks, chores, homework and the like, on his or her own	1	2	3	4	5	6
Monitoring own progress on homework, assignments, chores, and the like	1	2	3	4	5	6
Solving everyday problems (example: thinking of different	1	2	3	4	5	6

# Importance of Screening (impairment)

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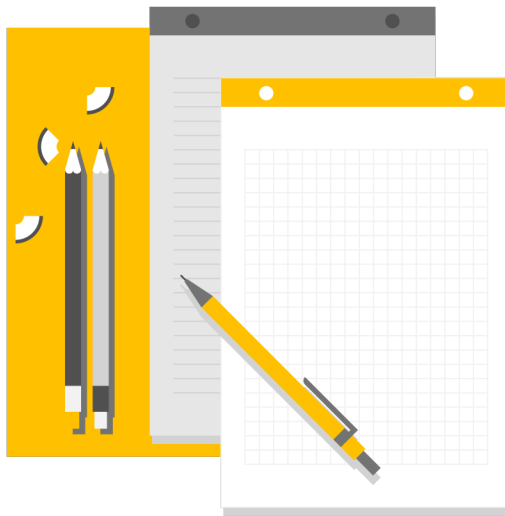


- Most of the lifetime history screening tools do not provide you information about current impairment
- Understanding both the history of injury as well as current impairment allows for effective adjustments/accommodations to be implemented
- Identifying the current impairment will help increase the persons ability to advocate for themselves



# Importance of Screening (Impairment)

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Tools are best if cost effective and easy to administer

2 approaches

- 1. self-report
- 2. neuropsychological screen





# Screening tools (impairment)

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- Neuropsychological Screening Tools to consider include:
  - Automated Neuropsychological Assessment Metrics, Core Battery
  - Neuropsychological Assessment Battery – Screening Module
  - Repeatable Battery for the Assessment of Neuropsychological Status

*More information about these screens can be found at this link and by clicking on “Neuropsychological Screening Batteries Chart”:*

*[Neuropsychological Screens](#)*

- Self-Report Screening Tool to consider:

*Adult TBI Protocol: [adult self-report and strategies](#)*

*Juvenile TBI Protocol: [juvenile self-report and strategies](#)*



# Neuropsychological Screen

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- The University of Denver has developed an on-line course designed to train community-based mental health providers how to conduct neuropsychological screening. This course is offered through the University of Denver Center for Professional Development.
- Neuropsychological Screening Tests for Mental Health Clinicians: An Intensive Short Course: [https://www.du.edu/registrar/elevate-courses/course.html?instanceCode=CPD0201\\_NEUROPS&courseInstanceID=CPD-0201\\_96447117&courseCode=CPD-0201](https://www.du.edu/registrar/elevate-courses/course.html?instanceCode=CPD0201_NEUROPS&courseInstanceID=CPD-0201_96447117&courseCode=CPD-0201)
- This 3-hour online, self-paced, training course is designed for licensed mental health providers (including LPC, LMFT, LCSW, and LAC) who are interested in learning about the use of neuropsychological screening batteries for clinical practice.



# Colorado Symptoms Questionnaire

To obtain, contact Liz  
Gerdeman @  
liz.gerdeman@state.co.us

## SYMPTOMS QUESTIONNAIRE

Name: \_\_\_\_\_ Date: \_\_\_\_\_

In recent weeks, how much have you been bothered by the following problems?  
Please mark only one circle per item.

MEMORY CONCERNS	I do not experience this problem at all	I experience this problem but it does not bother me	I am mildly bothered by this problem	I am moderately bothered by this problem	I am extremely bothered by this problem
Losing or misplacing important items (e.g., keys, wallet, papers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting what people tell me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting what I've read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Losing track of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting what I did yesterday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting things I've just learned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting meetings/appointments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting to turn off appliances (e.g., iron, stove)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DELAYED PROCESSING	I do not experience this problem at all	I experience this problem but it does not bother me	I am mildly bothered by this problem	I am moderately bothered by this problem	I am extremely bothered by this problem
Trouble following conversations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering only one or two steps when someone is giving me instructions or directions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking too long to figure out what someone is trying to tell me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Modified from Colorado Brain Recovery, March 2019

SYMPTOMS QUESTIONNAIRE 1



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# Strategies for Inmate/Probationers



## Organization Problems

Organization is the ability to use your time, energy or resources in a helpful way to finish goals or tasks. People who have a hard time with organization notice they have problems keeping a schedule, prioritizing, starting tasks, switching from one activity to another, or keeping up with time-sensitive tasks (for example, paying bills, completing paperwork, etc.). Using and practicing the following tips can be helpful:

1. To help master your schedule, you can use a notebook, planner, or digital calendar and reminder app on your phone or watch. Review weekly and monthly schedules frequently.
2. If you have trouble prioritizing duties, use a system of organization. For example, highlight important events, bill due dates, and other deadlines.
3. If you have a hard time remembering important activities or appointments, set up a routine by asking that your regular appointments be scheduled on the same day and at the same time when possible.
4. To help yourself switch between tasks, set a timer or use a watch to alert yourself when to wrap up what you're doing, and when to get ready for your next task.<sup>2</sup>
5. If you have a hard time finishing projects on time or correctly, break them down into smaller, simple tasks and cross off each step as it is completed.
6. Poor sleep can add to organizational problems. You can review the attached sleep to help improve sleep habits.

Compiled by H. Allo, D. Daugherty, & H. Schuveiller March 11, 2019

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## Inhibition Problems/Impulsivity

Impulsivity is when you find it hard to think before you act or say something. You might notice yourself cutting someone off before they finish talking or doing the first thing that comes to mind. You may also find it hard to control your emotions and show them in a way that others will understand. Even though these behaviors are not on purpose, it can be frustrating if you find yourself getting in trouble for your actions. Using and practicing the following suggestions can be helpful:

1. Stop → Think → Act! When you notice yourself acting on the first thing that pops into your mind, STOP and count to 3 while you think about the possible outcomes of what you are about to do before you do it.



2. Breathing techniques can help you relax when you are feeling out-of-control. A simple exercise that you can do is focus on your breathing for 60 seconds. Breathe in through your nose, hold your breath for 6 seconds, and then breathe out through your mouth.
3. Wait until others have finished talking before sharing your thought. If you find yourself disrupting conversations, try silently repeating the question(s) to yourself before offering an answer. This can help you avoid cutting others off when they are speaking.
4. If you find it hard to stay focused in any setting, physical or mental breaks can help. For example, try going for a short walk to take a break and refocus.
5. When working with others in a group setting, bring a notepad with you to write down your thoughts as they pop into your head. This can help avoid any interruptions that may have been caused by speaking out of turn.
6. Write down step-by-step instructions or create a checklist to help yourself complete tasks or instructions.
7. Poor sleep can contribute to impulsivity. You can review the attached sleep checklist to help promote better sleep habits.

Compiled by E. Halbert, K. Janicke, & T. Morgan March 11, 2019

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## Attention Problems

There are different kinds of attention. One kind allows you to think about one thing for a short period of time, another type helps you ignore distractions and another type allows you to shift your attention from one thing to another. People with attention problems have a hard time staying focused during meetings, may get off-topic during conversations, and may have trouble remembering important details. Having trouble finishing tasks, especially when it is noisy or you are distracted, is a common problem. Using and practicing the following suggestions can be helpful:

1. Recording information can be helpful. To help you remember important details, you can take notes or record voice messages after important meetings.
2. To help you complete tasks, break them into small steps, create a list and work on only one step at a time.
3. Distracting places can make these problems worse (for example, spaces that are noisy, full of clutter, have busy views, or frequent interruptions). As much as possible, work in quiet, non-distracting places.
4. When possible, wear earphones to drown out excess noise.
5. To help you remember meetings or important dates, use the calendar or reminders on your phone/watch/computer or use a regular paper planner or calendar.
6. During important meetings, take a minute to repeat or summarize important points to help you remember.
7. Attention can get worse as the day goes on. When possible, try to schedule important appointments earlier in the day.
8. Attention can get worse if you don't sleep well. Using the attached sleep guide to help you practice better sleep habits.

Compiled by N. Amundson, M. Aud, & Q. Kais March 11, 2019

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# Strategies Guidebook for Professionals

## Cognitive Strategies for Community Mental Health



**MINDSOURCE**  
BRAIN INJURY NETWORK



1

-  **Memory Problems**
-  **Delayed Processing**
-  **Attention Problems**
-  **Inhibition Problems/Impulsivity**
-  **Physical and Sensorimotor Problems**
-  **Language Problems**
-  **Organization Problems**
-  **Mental Inflexibility**
-  **Emotional Dysregulation**
-  **Appendix - Sleep**



**NASHIA**

# The “So What”: Adjustments/Accommodating

## Framework for Support



We are NOT treating the brain injury; we ARE treating the behavioral health concern in the context of brain injury



Demystifies brain injury for non-brain injury professionals



Empowers individuals with brain injury and families to advocate for appropriate supports



# The “So What”: Adjustments/Accommodating

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Strategies should be easy to implement and appropriate to the environment



Strategies should be person centered; the person needs to be integral in:

1. Recognizing the need for a strategy
2. Developing a strategy
3. Monitoring progress



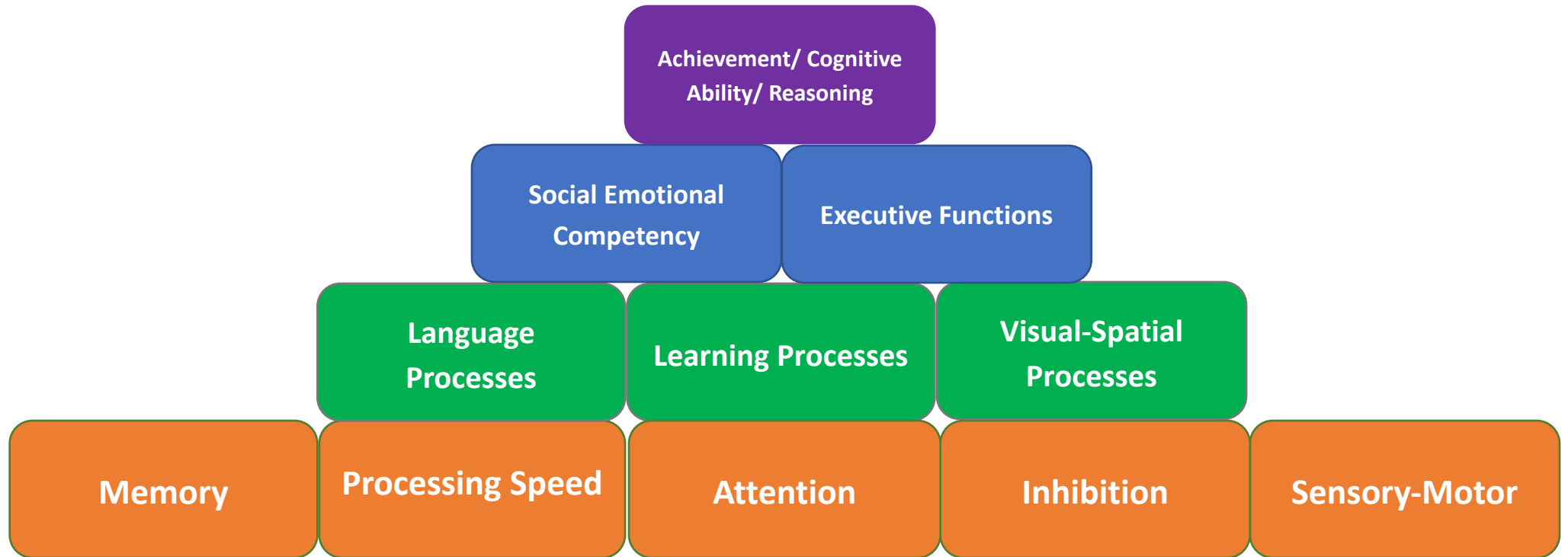
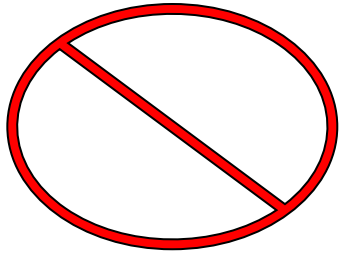
# Building Blocks of Brain Development ©



The Hierarchy of Neurocognitive Functioning © - created by Peter Thompson, Ph.D. 2013, adapted from the works of Miller 2007; Reitan and Wolfson 2004; Hale and Fiorello 2004.

The Building Blocks of Brain Development © – further adapted by the CO Brain Injury Steering Committee, 2016.





~~Attention~~

Achievement/ Cognitive Ability/ Reasoning

Social Emotional Competency

Executive Functions

Language Processes

Learning Processes

Visual-Spatial Processes

Memory

Processing Speed

Inhibition

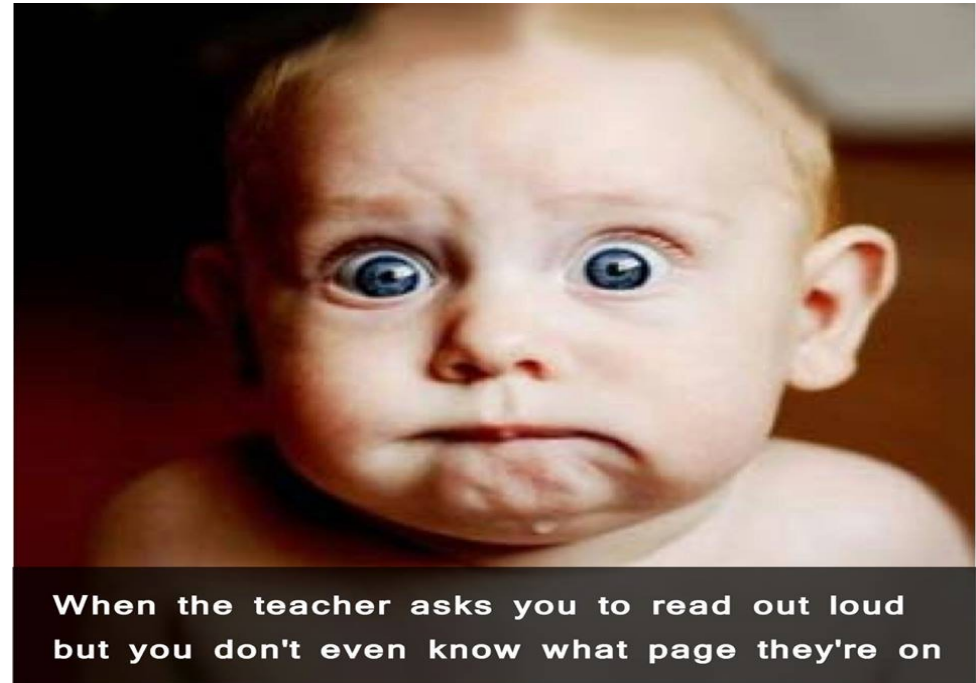
Sensory-Motor

# The “So What”: Adjustments/Accommodating

## Impaired Attention

### What it looks like:

- Fidget, squirms in seat, can't sit still
- Interrupts conversation
- Talks excessively
- Off topic
- Impulsivity (inability to inhibit)



# The “So What”: Adjustments/Accommodating

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## Impaired Attention

### Adjustments/Accommodations:

- Check to make sure you have the persons attention before giving instructions
- Work on one task at a time to avoid the need to divide attention
- Reduce distractions, meet in a quiet environment
- Off topic
- Keep instructions brief, simple and to the point



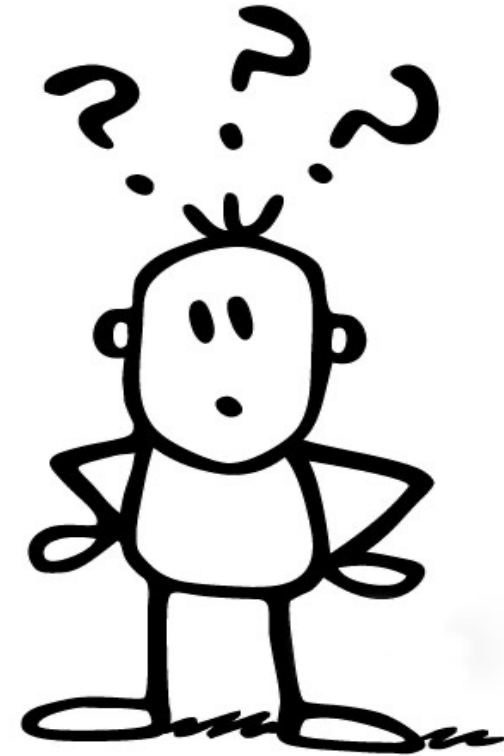
# The “So What”: Adjustments/Accommodating

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## Short Term Memory Loss

### What it looks like:

- Can't remember more than one thing at a time
- Can't remember details
- Appears disorganized
- Appears to have an “attitude” problem
- Appears manipulative



# The “So What”: Adjustments/Accommodating

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## Short Term Memory Loss

### Adjustments/Accommodations:

- Repeat and summarize information
- Provide written summary
- Review new information frequently
- Stick to routine as much as possible
- Keep information concise, tangible, and relevant



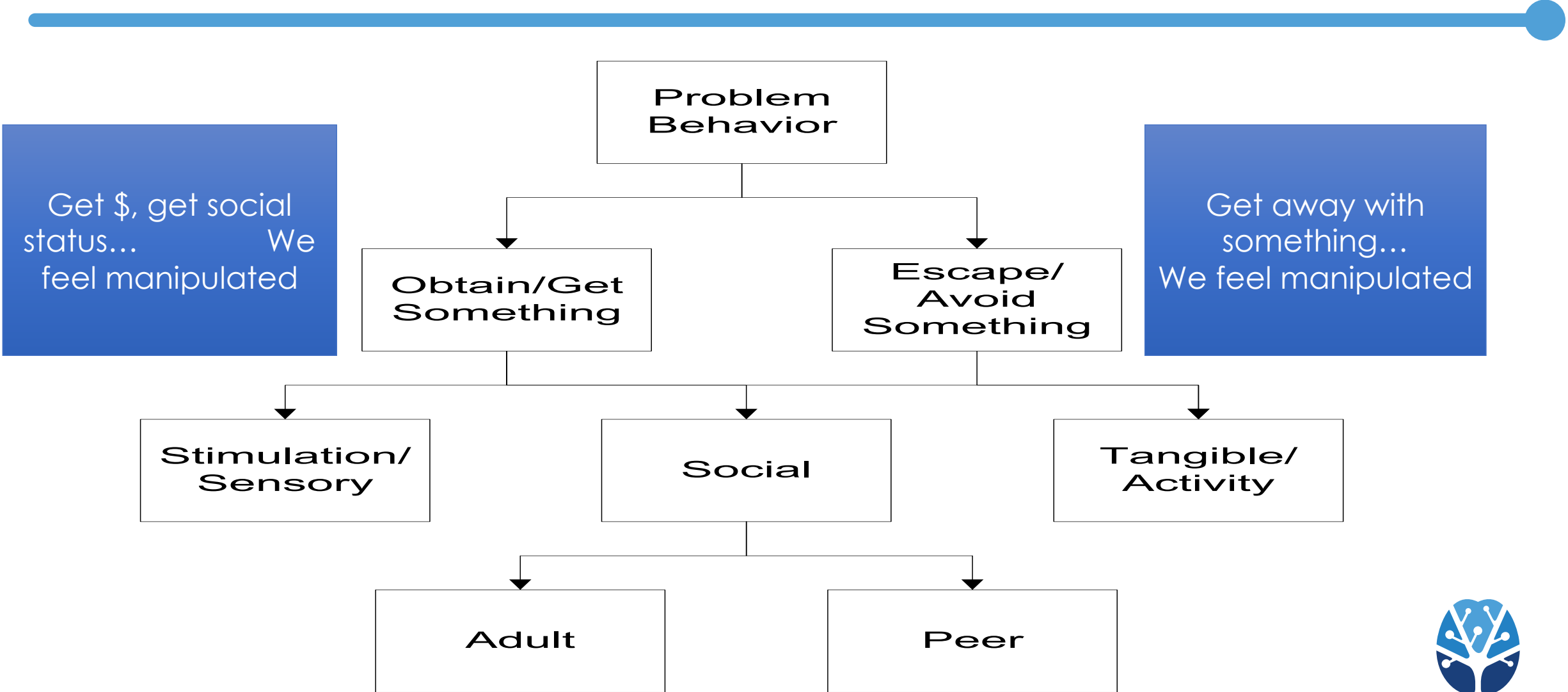
# Can't vs Won't

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Looking Through a Different Lens

# Look For: The Function of the Behavior





Attention

Memory

Executive DYSFUNCTION:

- Inability to delay gratification (wait)
- Inability to manage time – no future thinking which results in poor planning, organization or initiation

Social INCOMPETENCE:

- Inability to make better behavioral or social decisions.

- Lack of attention to feedback in environment = poor MEMORY & poor LEARNING = repetitive mistakes

Achievement/  
Cognitive Ability/  
Reasoning

Social Emotional  
Competency

Executive Function

Language  
Processes

Visual-Spatial  
Processes

Processing  
Speed

Learning  
Processes

Inhibition

Sensory-Motor

CO Brain Injury Steering Committee: Adapted from Miller, 2007; Reitan and Wolfson, 2004; Hale and Fiorello, 2004



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# Skill vs Will

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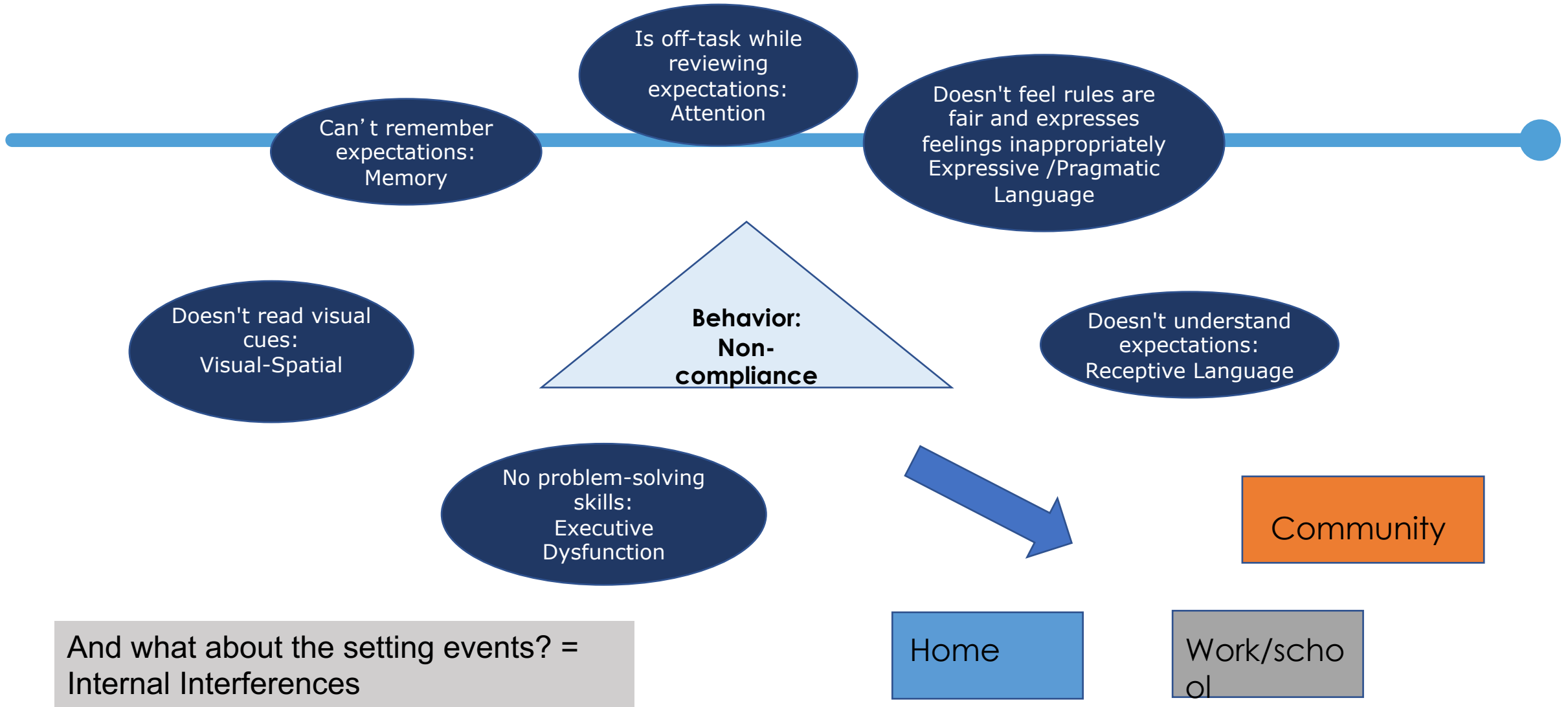
If think they have the skill but choose to not use it, likely to think punishment



If think they don't have the skill, less likely to think punishment, more likely to think of teaching the skill



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# Function of the Behavior

Make sure you have attention before reviewing expectations

Is off-task while reviewing expectations: Attention

Teach appropriate ways to express verbal discontent

Doesn't feel rules are fair and expresses feelings inappropriately Expressive /Pragmatic Language

Write out/draw out steps to compensate for memory

Can't remember expectations: Memory

Review expectations in visual, multi-modal fashion

**Behavior: Non-compliance**

Doesn't understand expectations: Receptive Language

May need to teach facial cues, non-verbal cues

Doesn't read visual cues: Visual-Spatial

How pervasive? What's your Body of Evidence?

May need to teach Cog. Beh. Therapy skills CBT

No problem-solving skills: Executive Dysfunction

Community

And what about the setting events? = Internal Interferences

Home

School/work

Be mindful of Rx interactions, family stress, financial stressors, medical/neurological factors

# Function of the Behavior I

# Psychoeducational Supports

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- It is important to provide education about brain injury to the justice-involved individual and, when appropriate, their family
- The screening process might be the first time they are identifying and understanding that they have a brain injury
- Message needs to be that they are not “broken” and that there are ways to compensate for the deficits that they experience
- The person may not be able to recognize their deficits immediately. It is important to meet them where they are

# AHEAD, Colorado Model



The screenshot shows the 'AHEAD' program website. At the top, it says 'MINDSOURCE' and 'AHEAD. ACHIEVING HEALING THROUGH EDUCATION, ACCOUNTABILITY, AND DETERMINATION. A PSYCHO-EDUCATIONAL CURRICULUM FOR TRAUMATIC BRAIN INJURY'. Below this, there are two columns: 'MODULES' and 'MATERIALS NEEDED'. The 'MODULES' column lists five modules: 'MODULE 1: UNDERSTANDING TBI AND SYMPTOM RECOGNITION', 'MODULE 2: MEMORY SKILLS AND GOAL SETTING', 'MODULE 3: EMOTIONAL REGULATION', 'MODULE 4: COMMUNICATION MASTERY', and 'MODULE 5: TBI AND ANGER IDENTIFICATION, SETTING AND LIMITS (WORKING DRAFT)'. The 'MATERIALS NEEDED' column lists 'INSTRUCTOR MATERIALS' (Facilitator Guide, Case Handouts, Instructor worksheets, Handouts for use, and a list of materials for each session), 'STUDENT MATERIALS' (Paper and pencil, TBI worksheet, and TBI assessment/feedback), and 'SUPPLIES AND EQUIPMENT' (Whiteboard for large writing and Markers). Below the columns is an 'Introduction' section with text about the program's development and goals.

- Group psycho-educational curriculum
- Can be used individually
- TBI-focused, but relevant for other populations as well

## Seven Modules:

1. Understanding TBI/Symptom Recognition
2. Memory Skills/Goal Setting
3. Emotional Regulation
4. Communication Mastery
5. TBI and Anger
6. Stopping & Thinking
7. Grief



# Building in Wrap Around Supports

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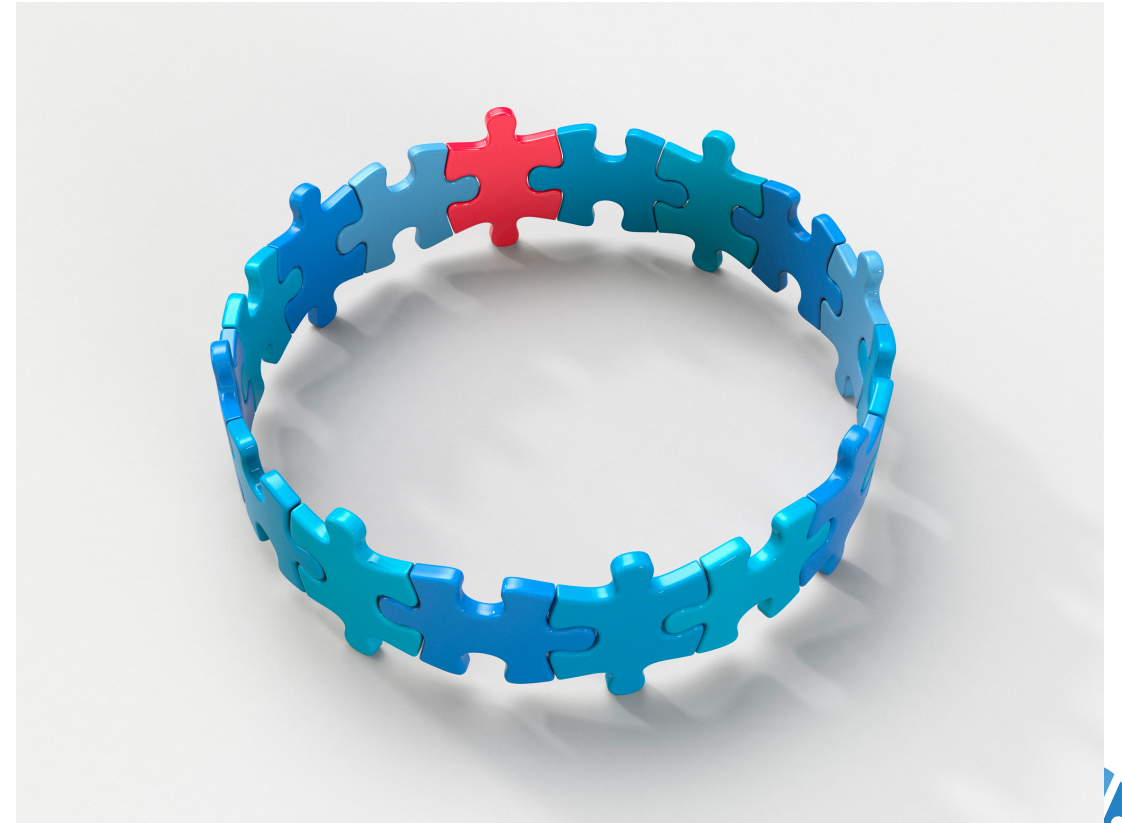
- Supports can be provided while the person is “in” the system
- Important to consider what supports will be necessary and available when they are no longer under supervision
- Beneficial to do a warm hand off from the justice system to the community support while they are still under supervision
- Resource facilitation/case management has proven to be an effective means to reducing recidivism support for justice-involved individuals

# Case Management/Resource Facilitation

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Components:

1. Assessment of needs
2. Provision of brain injury education and promote awareness of resources
3. Proactive navigation to community-based supports, resources, and services
4. Connection to appropriate resources





# Efficacy of Case Management/Resource Facilitation

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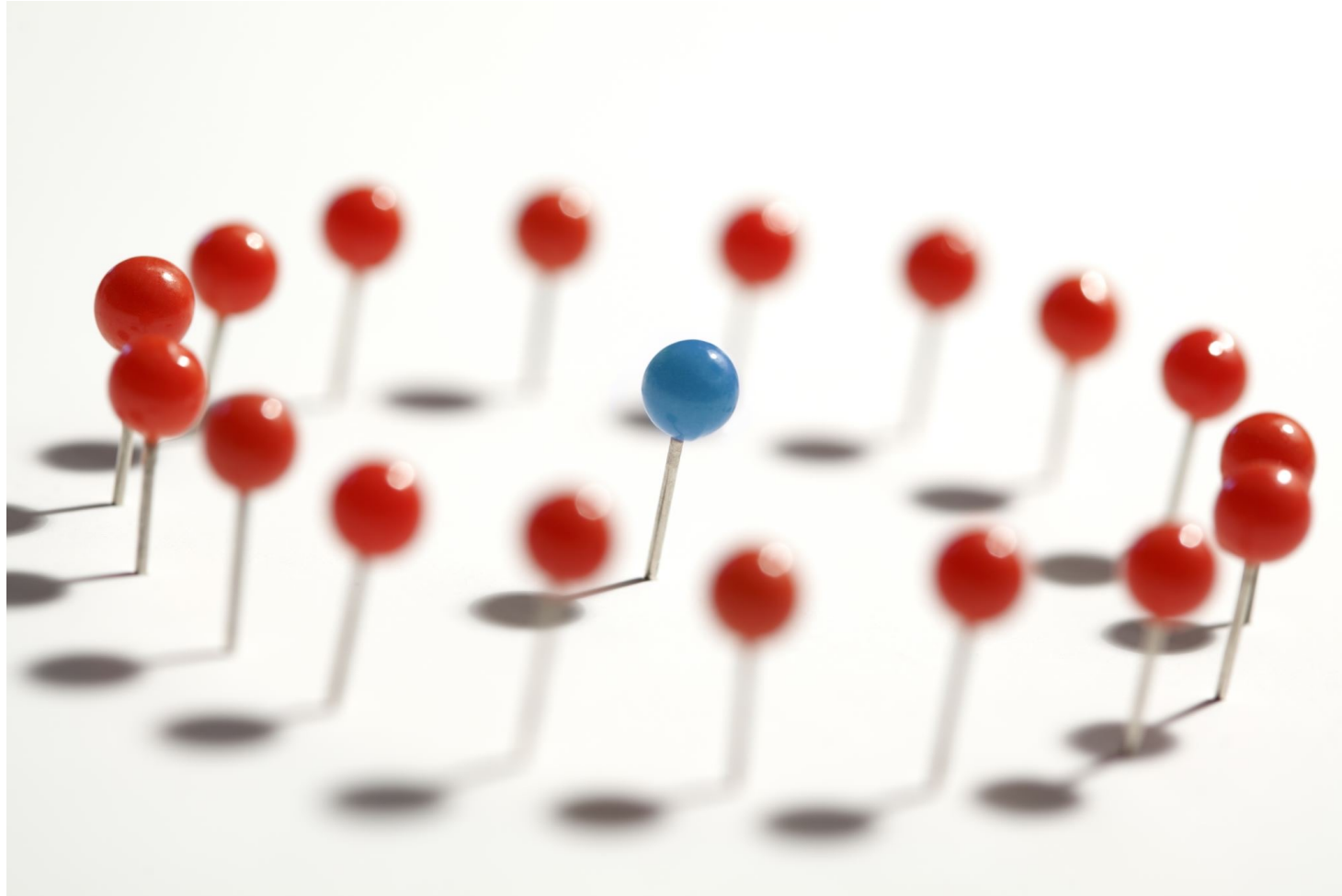
Indiana researchers found:

- Return to work for Resource Facilitation (RF) group was significantly better in RCT's (64-69% as compared to 36-50%)
- Level of disability associated with brain injury decreased even at 10 years post-injury with RF
- Significant improvement in activities of daily living with RF
- Perceived need for services declined with RF and number of services used declined with RF

(Texler L.T., et. al, Journal of Head Trauma Rehabilitation, 2018)

# Resources

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# Accommodating the Symptoms of TBI [Booklet PDF](#)

Presented by:

Ohio Valley Center for Brain Injury  
Prevention and Rehabilitation

With contributions from Minnesota Department of Human  
Services State Operated Services

Developed in part with support of a grant from the US Department of Health and Human Services, Health Resources and Services Administration (HRSA) to Ohio Rehabilitation Services Commission and The Ohio State University

[Booklet order form PDF](#)

# TBI Toolkit

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[Free Online Toolkit](#)

[Mental Health, Criminal Justice, and Brain Injury Toolkit](#)



Developed by researchers at the Department of Veterans Affairs, this toolkit is designed to assist providers in identifying TBI and associated co-occurring problems and determining potential need for further evaluation and/or mental health treatment modification.

Click [here](#) to access the toolkit. Click [here](#) and open the “Training Resources” menu for valuable slides from the initial training on this toolkit.

The goal is to offer providers working with clients who have a history TBI and mental health symptoms the following:

- Background information/Education
- Screening and Assessment Tools
- Interventions and Treatment Modification Suggestions
- [Additional resources](#)

# Cokids with Brain Injury

[www.cokidswithbraininjury.com](http://www.cokidswithbraininjury.com)

Firefox Traumatic Brain Injury Networking Tea...  
cokidswithbraininjury.com

Brain Injury Alliance COLORADO  
Colorado Traumatic Brain Injury Trust Fund  
cde COLORADO DEPARTMENT OF EDUCATION

Stay Connected! Join our Listserve

HOME FOR EDUCATORS AND PROFESSIONALS FOR PARENTS UPCOMING EVENTS KEY TERMS CONTACT US

### WELCOME TO THE TBI NETWORKING TEAM

The website was designed through funding from the Colorado TBI Trust Fund. This website should serve as a tool for educators, school administrators, school psychologists, related services professionals, and families. Feel free to join in the discussion and learn more about how to support our kids in Colorado with brain injuries.

### ANNOUNCEMENTS & UPDATES

**New!! Lake Paddle Sports Day-Brain Injury Alliance of Colorado, Monday, June 30th.** Family & friends are welcome. [Click here to view flyer.](#)

**New!! Colorado Brain Injury Program** is accepting applications for the education grant. [Visit the website by clicking here.](#)

**New!! Grand Junction Conference "Applied Sports Medicine in Primary Care: Concussion- A Comprehensive Review"- Friday, July 18, 2014.** [Click here to view flyer.](#)

Windows Taskbar: 5:30 PM 6/7/2014

# NASHIA

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- Website Resources

  - [Criminal & Juvenile Justice](#)

  - [Criminal & Juvenile Justice Best Practice Guide for State Brain Injury Programs](#)

- Leading Practices Academy

  - Direct state TA & consultation
  - Six Academy meetings per year
  - Peer-to-peer support
  - Online HUB with resources & community forum
  - Annual Summit

  - [Leading Practices Academy on Criminal and Juvenile Justice](#)



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# Best Practices Protocol

1. Screening for lifetime history of brain injury
2. Screening for current impairment
3. Adjusting to support impairment
4. Training and education for criminal justice staff
5. Psycho-education for justice involved individual with brain injury
6. Referral to community-based support

*Criminal and Juvenile Justice Best Practice Guide and Supporting Materials:*

<https://www.nashia.org/resources-list/ultvlaicnk14l0k1f0prgqvhlt04f-8wllr>



# Resources

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Brain Injury Association of America: <https://www.biausa.org/>

National Association of State Head Injury Administrators: <https://www.nashia.org/>

TBI Model Systems Knowledge Translation Center: <https://msktc.org/tbi/factsheets>

United States Brain Injury Alliance: <https://usbia.org/>



[https://www.ted.com/talks/kim\\_gorgens\\_the\\_surprising\\_connection\\_between\\_brain\\_injuries\\_and\\_crime?language=en](https://www.ted.com/talks/kim_gorgens_the_surprising_connection_between_brain_injuries_and_crime?language=en)

Ideas worth spreading



Kim Gorgens | TEDxMileHigh

**The surprising connection between brain injuries and crime**

11:35

Share  
Add to list  
Like  
Recommend



**Thank you.**

[nashia.org](http://nashia.org) | [jdettmer@nashia.org](mailto:jdettmer@nashia.org)



# GPRA Link (SAMHSA Required Evaluation)

This is a shared event of the Mid-America and Mountain Plains ATTC



[ttc-gpra.org/GPRAOnline/SG?e=456753](http://ttc-gpra.org/GPRAOnline/SG?e=456753)