

The Intersection Of Brain Injury And Domestic Violence: Adapting Assessment and Treatment

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BRAIN INJURY NETWORK

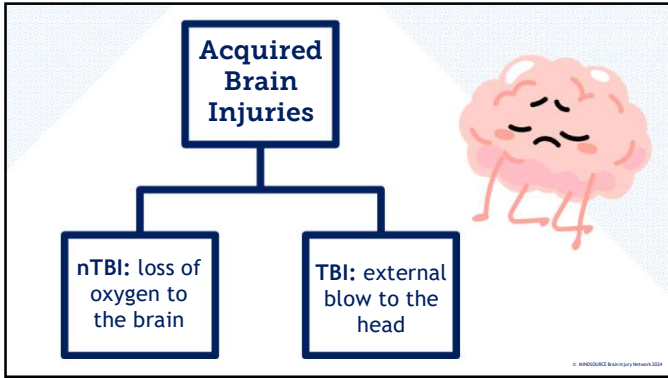
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Case Study

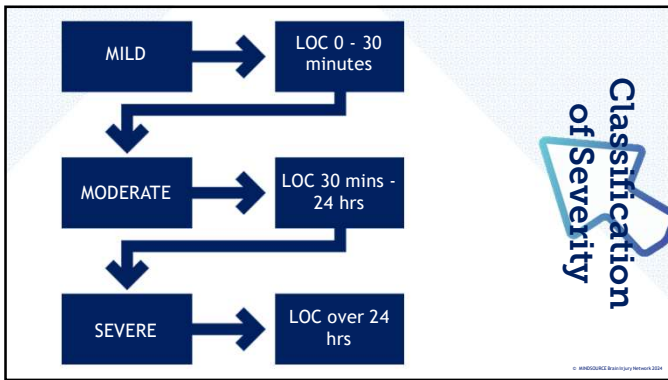
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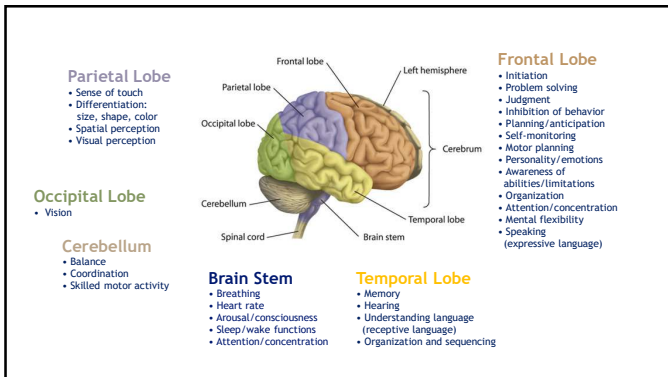
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Mechanism of Injury

Needs & interventions are similar

Traumatic Brain Injury

Coup: Injury on the side of the head where the blow occurred.

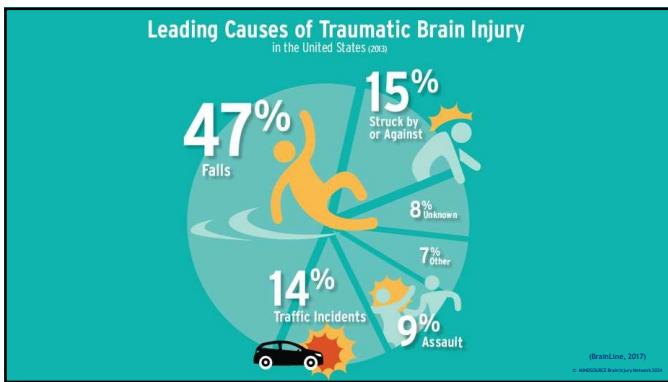
Contrecoup: Injury on the opposite side of the head from the blow.

Non Traumatic Brain Injury

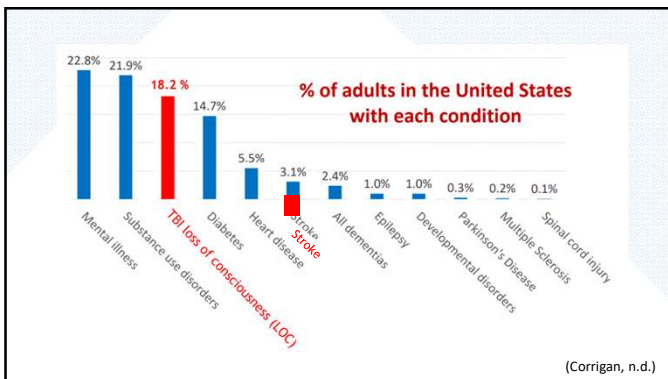
Anoxia:
A loss of oxygen to the brain caused by an airway obstruction due to choking, strangulation, near drowning or drug reactions.

Stroke:

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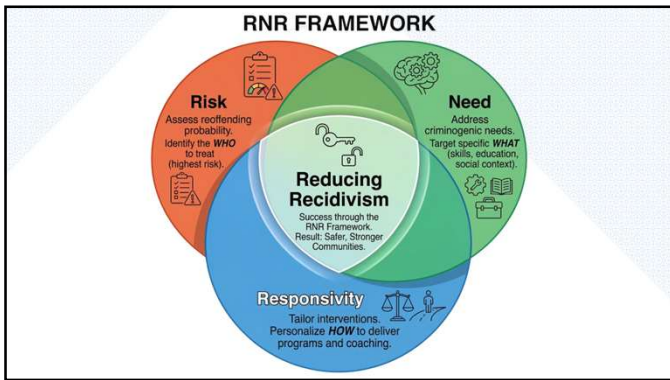
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Childhood BI and risks for CJ system involvement

Higher prevalence rates in general

- Avg 3.8 events, most occurring in childhood

• Brain injuries in childhood associated with

- Violent offending
- Criminality
- Conduct disorder



Sharma, et al., 2020
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TBI and correctional services:

- Increased utilization of services while incarcerated (health and psychological)
- Lower rates of treatment completion
- Higher rates of disciplinary incidents
- Lower ability to maintain rule-abiding behavior during incarceration
- More prior incarcerations
- Higher rates of recidivism (50% higher than those with no reported TBI)
- Higher levels of AOD use preceding their current incarceration

Reichow & Solberg, 2011
© 2010 American Psychological Association

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- Agitation after traumatic brain injury (TBI) is the most frequently observed behavioral problem
- Injury to the frontal lobes can affect the area of the brain that normally controls impulses
 - The inability to control urges can lead to impulsive and often inappropriate social behavior

Criminogenic Need and Brain Injury

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Criminogenic Need and Brain Injury


Individuals with brain injury report loss of relationships, including friendships, is one of the most devastating effects of brain injury

Studies have shown up to a 66% unstable employment or unemployment rate following brain injury

In a study of persons 3 to 5 years after complicated mild to severe TBI, 60% had at least some difficulty performing leisure activities

BRADSHAW, G.L.; KRIVITZKY, M.; WISNIE, M., 2010
© HANSEN-KHON, 2010

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Substance Abuse and Brain Injury

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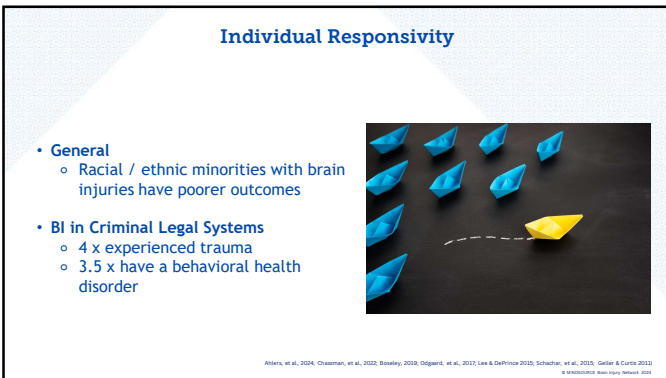
Central 8 Criminogenic Needs	
<p>Low Self Control: arrested at young age, large number of prior offenses, rule violations on conditional release</p> <p>Generally, BI decreases self-regulation, increases disinhibition, poor judgement, executive functioning</p>	<p>Lack of Employment / Education: Low levels of performance and involvement, low levels of reward and satisfaction</p> <p>Generally, those with BI are more likely to be underemployed, less likely to be employed, maintain employment, and find employment satisfying</p>
<p>Pro-Criminal Relationships: association with pro-criminal others, isolation from pro-social others</p> <p>Generally, loss of friendships after brain injury</p>	<p>Dysfunctional Family / Marital: poor communication, significant conflict (parent-child, spouse-spouse), criminal involvement, lack of appropriate behavioral expectations and rules</p> <p>Generally, loss of romantic relationships and divorce are more common after brain injury; parenting can become more difficult after brain injury</p>
<p>Anti-Social Personality Pattern: impulsive, adventurous, pleasure-seeking, generalized trouble in multiple settings, callous disregard for others, lack of empathy, anger problems</p> <p>Generally, those with BI struggle with emotional and impulse control and have difficulties understanding others' emotions</p>	<p>Lack of Prosocial Leisure / Recreation: low levels of involvement and satisfaction in recreational activities</p> <p>Generally, people struggle to engage in activities they used to enjoy post-injury</p>
<p>Pro-Criminal Cognitions: Identification with criminals negative attitudes towards law and justice system, belief that crime with yield rewards, rationalizes crime</p>	<p>Substance Misuse / Abuse: Continued use despite significant life disruptions; increased tolerance to drugs / alcohol; increased use over time; inability to stop use</p> <p>Generally, brain injury is strongly associated with substance abuse</p>

(Andrews & Bonta, 2010)

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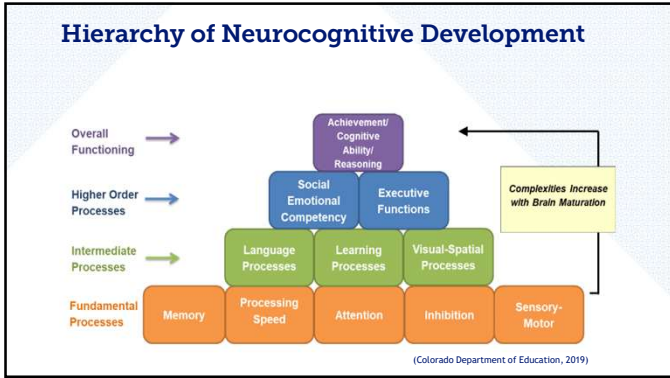
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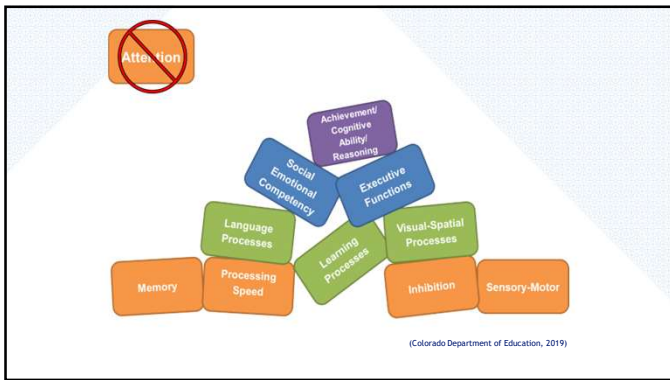
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Special Risks to Women

- Significantly more **post-concussive symptoms**
- Higher rate of **long-term disability**
- **Poorer physical health**, e.g., more inflammation
- More **cognitive difficulties**, e.g., executive dysfunction and memory deficits
- More **affective problems**, particularly suicidality
- Higher risk of **early onset dementing disease**
- **50% reported not receiving needed care**, particularly for mental health symptoms
- **More structural and financial barriers**

Wise et al., 2018

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TBI and Mental Health

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The First Year: A Critical Window

-50% of survivors with no prior history develop a mental health disorder within 12 months.

Common Diagnoses: Depression, PTSD, Mania, Panic Disorder, and Psychotic Disorders.

Behavioral Shifts: Significant increases in post-traumatic aggression and specific phobias.

Kim et al., 2007; Simpson & Tate, 2002; Wise et al., 2011; Gennarelli et al., 2011; Gould et al., 2011; Patel et al., 2014; Mackelprang et al., 2014

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Emotional and Crisis Risks



1 in 3 survivors experience severe emotional distress (6-12 months post-injury).

Persistent Struggles: High rates of hopelessness and suicidal ideation.

Kim et al., 2007; Simpson & Tate, 2002; Miu et al., 2011; Genshaft et al., 2010; Gould et al., 2011; Patel et al., 2014; Mackelprang et al., 2014

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Ongoing Suicidality Risks



Ideation: 7x higher than the general population.

Attempts: 17% of TBI survivors attempt suicide post-injury.

Long-term Vulnerability: Elevated suicide risk persists for up to 15 years post-injury.

Kim et al., 2007; Simpson & Tate, 2002; Miu et al., 2011; Genshaft et al., 2010; Gould et al., 2011; Patel et al., 2014; Mackelprang et al., 2014

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Brain Injury and Trauma



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Stability Factors

- Housing
- Transportation
- Medical Issues
- Socio-Economic Status
- Geographic location
- Access to resources

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More likely to experience homelessness

50% of those unhoused have a brain injury

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More likely to use healthcare resources

- More likely to get a new health diagnosis
- More likely to use healthcare resources




Baillio, 2021


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ACL Grant


MINDSOURCE
University of Denver
Colorado Judicial
Brain Injury Alliance of Colorado



Lifetime History
Screened for lifetime history of brain injury using the OSU-TBI-ID



Cognitive Impairment
Those positive were screened for neuropsychological impairments.



Strategies & Support
Clients and the professionals were provided with suggested strategies and supports.

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Criminal Justice Entity	Total OSU Screened	Positive Screens	Percent Positive
Arapahoe County Probation	51	28	54.9%
Boulder County Jail (JBBS & JET Units)	369	215	58.2%
Denver County Jail (RISE unit)	1352	360	26.6%
Denver County Jail (Transition Unit)	732	449	61.3%
Larimer County Jail	480	287	59.7%
Adams County Probation (Females)	31	30	96.7%
Adams County Probation (Veterans)	111	47	42.3%
Adams County Probation (Sex offenses)	69	28	40.5%
Denver Drug Court	686	299	43.5%
Denver Juvenile Probation	445	82	18.4%
Jefferson County Recovery Court	81	49	60.4%
Total	4,407	1,854	42%

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Total number of screens: 4,160

Total number of positive screens: 1,931

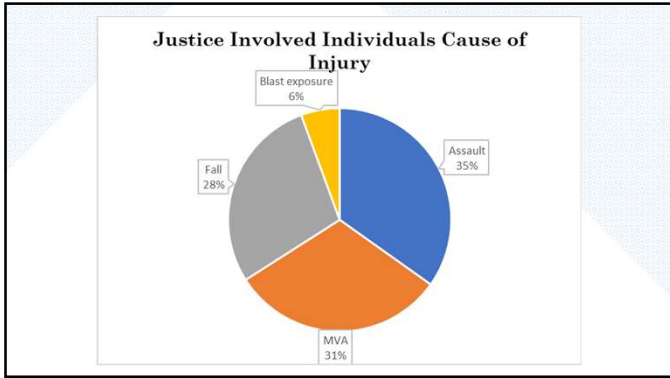
Total percentage of adults with positive screens: 48%

Total percentage of juveniles with positive screens: 18%

What does this tell us?

Of those with positive screens, 73% had current, positive neuropsychological impairment

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Brain Injury and Recidivism

TBI is associated with greater risks for recidivism

- Higher risk classifications
- More likely to have committed a previous felony
- Less likely to be successful with supervision

Ray et al., 2017
© 2018 North Star Injury Research, LLC

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Justice Involved Women

- **Twice as likely** as men to incur a TBI of any kind
- **6x as likely** as men to have multiple violence related TBIs
 - Violence-related TBIs related to more reports of **physical illness**
 - Violently injured women had **longer total incarceration times**, not because of offense but because of re-arrest
 - More likely to have violent related injuries happen close in time, increasing risk of developing **neuropathological conditions** as they age

Wahl et al., 2018

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Colorado Brain Injury Model

1. Training to understand brain injury & effects
2. Screen for lifetime history
3. Adjust supervision and treatment
4. Refer for going supports

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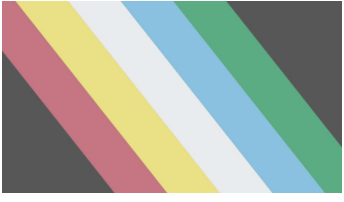
Achieving Healing Through Education, Accountability, and Determination (A.H.E.A.D.)

- Week One:** Understanding TBI and Symptom Recognition
- Week Two:** Memory Skills and Goal Setting
- Week Three:** Emotional Regulation
- Week Four:** Communication Mastery
- Week Five:** TBI and Anger - Identification, Options, and Understanding
- Week 6:** Why Stopping and Thinking is Important
- Optional Module:** Grieving and TBI

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**RNR vs
Desistance**

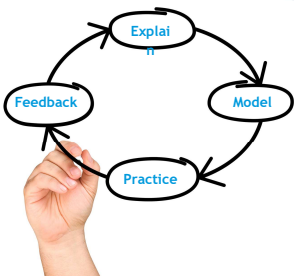
Skill Correction → Skill Development



- Aligns with disability field
- Create conditions and make environmental adjustments to ensure people can access your services effectively
- Invites successful engagement

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Skill Development



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You're Not Treating the Brain Injury



Injury likely happened years or decades earlier

Teach and reinforce the use of simple strategies to improve engagement, participation, and outcomes.

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Reshaping Cognitions

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Attuning to Cognitive Impairments

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Common Symptoms

- Speech-language
- Organization
- Attention
- Learning
- Memory
- Hearing

- Slowed movement
- Coordination
- Headaches
- Balance
- Fatigue
- Vision
- Pain

- Depression
- Anxiety
- Irritability
- Mood Swings
- Blunted emotions

- Aggression
- Impulsivity
- Anger Management
- Social Skills Challenges

Daug Goldman Center on Brain Injury Research and Training (CBIRT) <https://cbirt.org/>

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Cognitive Strategies


- Speech-language
- Organization
- Attention
- Learning
- Memory
- Hearing

- Reduce visual and noise distractions.
- Give brief and simple instructions. Use plain language.
- Utilize checklists and a written schedule of routines.
- Provide written cues for organizing ("first do this, then do this"), breaking complex directions into simple steps.
- Practice and reinforce strategies until they become automatic.

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Cognitive Strategies, cont.




- Speech-language
- Organization
- Attention
- Learning
- Memory
- Hearing

- Plan for changes in routines and reinforce flexibility.
- Teach clients to use reminder systems, e.g., planner, electronic reminders.
- Allow for extra time for the person to process and respond to information. Check for understanding.
- Repeat and summarize information.
- Be direct and concrete. Avoid abstract humor, sarcasm, metaphors, and colloquialisms.

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Physical Strategies




- Slowed movement
- Coordination
- Headaches
- Balance
- Fatigue
- Vision
- Pain

- Keep environment quiet
- Keep noise and lights to a minimum
- Keep sessions short to minimize onset of headaches and fatigue
- Schedule rest periods and breaks from planned activities

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Behavioral Strategies



- Aggression
- Impulsivity
- Anger Management
- Social Skills Challenges

- Suggest breaks
- Mindfulness exercises
- Practice positive social interactions
- Don't rush, speak over, or become observably frustrated
- Use de-escalation techniques

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Emotional Strategies

- Depression
- Anxiety
- Irritability
- Mood Swings
- Blunted Emotions
- Minimize anxiety
- Avoid focusing on deficits
- Promote self-awareness
- Don't interpret lack of emotion as a sign of lack of interest

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Brain Injury Informed Organizational Practices

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Environmental Considerations

Create a welcoming environment

- Dim or remove overhead **lighting**
- Play **soothing sounds** or use white noise machines
- Using **calming paint colors** and display inspirational artwork
- Ensure **seating** is welcoming and not crowded
- Allow use of **headphones** when appropriate
- Create **quiet spaces** for clients who need them
- Ensure clear and easy to read **signage** throughout
- Create an **environment that is welcoming** for friends and families

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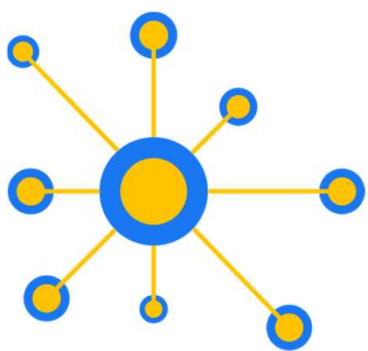
How to set all clients up for success



- Provide appointment reminders
- Assist in setting up or scheduling transportation
- Identify ways to engage support systems
- Use every interaction as an opportunity to develop trust
- Ensure use of simple, concrete language
- Set up each meeting with goals for meeting, time allowed, and identify what the client wants to discuss
- Use grounding activities to find focus
- Take breaks as needed
- Teach and reinforce use of organizational habits
- Schedule meetings at regular intervals
- Use visual aids
- Break material into chunks and repeat to aid in memory and retention
- Encourage development and maintenance of healthy physical activity routine
- Encourage and reinforce healthy sleep hygiene


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Resource Facilitation

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<p>Those with TBI are less likely to engage in treatment, services, and supervision</p>	 <p><small>(Trivedi & Parson (2020), Gergely et al., 2020) © RESOURCE Brain Injury Network 2021</small></p>
<p>If they engage in Resource Facilitation, they have:</p> <ul style="list-style-type: none"> Fewer reincarcerations Fewer arrests 	

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Post-Injury Care

- Advocacy
- Alternative Healthcare
- Assistance
- Behavioral Health
- Brain Injury Waiver: Home & Community Based Services
- Community Support
- Financial Assistance and Support
- Neurological Care
- Rehabilitation Care
- Vocational Rehabilitation




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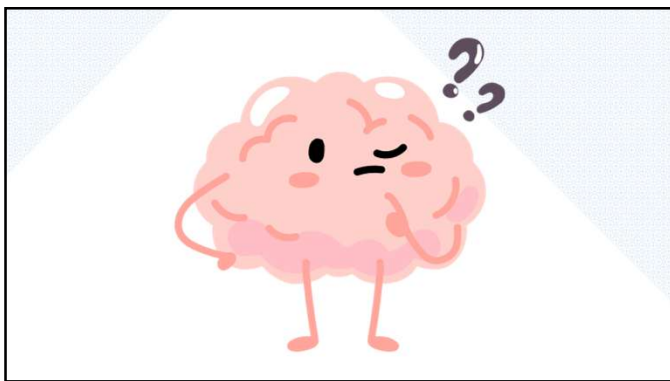
Your hub for Brain Injury Resources

www.mindsourcecolorado.org

- Resources
- Screening
- Training
- Meetings & Events
- Awareness Materials



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