Adapting Together: Efficacy of Interventions to Address the Needs of Individuals with Brain Injury within HCH Sites

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Goals of this presentation:

• To understand Traumatic Brain Injury (BI):
  – Why is it important in the work that we do
  – How does it affect our clients differently than other conditions

• To learn strategies that combine occupational therapy and mental health techniques to target the specific needs of clients with TBI.
  – Discuss evidence from pilot study supporting these strategies.

• How you can integrate effective interventions for individuals with brain injury into your own settings.
Understanding BI and Homelessness

• TBI screenings among individuals who are homeless have indicated 8-53% of those experiencing homelessness have sustained a TBI, which is **up to 5 times greater** than the general population
  [Hwang et al., 2008.; Topolovec-Vranic et al., 2014]

• 87% of adults with a reported history of TBI sustained TBI **PRIOR** to becoming homeless
  – Indicates TBI as a risk factor for homelessness
  [Topolovec-Vranic et al., 2014]

• In one meta-analysis, the **frequency of cognitive impairment in homeless adults was 25%**
  – The authors note significant gaps and limitations in understanding the true impact of cognitive impairment in this population
  (Depp, Vella, Orff, & Twamley, 2015)
Brain Injury and Homelessness

Topolovec-Vranic et al. (2017) found:

• Increased odds of a history of TBI with loss of consciousness were associated with:
  – All mental health and substance use diagnoses other than psychosis
  – A history of suicide attempts or recent suicidality
  – Having migraines and epilepsy

• A history of TBI with LOC were more likely to:
  – Have been in contact with the criminal justice system
  – More likely to visit the ER
  – More likely to report unmet health care needs even though they were more likely to have access to a regular medical doctor
Effects of Brain Injury

Common cognitive impairments include:

• Poor concentration
• Decreased attention
• Memory difficulties
• Impaired judgment
• Reduced ability to follow instructions

These cognitive deficits are consistently associated with poor functional outcomes in:

• Social interaction
• Problem solving
• Skill acquisition
• Occupational performance
• Independent living

Andersen et al. (2014).
Effects of Brain Injury

In addition to functional difficulties, studies show that a history of TBI is associated with increased vulnerability for poorer mental health, with elevated rates of:

- Generalized anxiety disorder
- Post-traumatic stress disorder
- Major depression
- Poor affect
- Suicidal ideation

Andersen et al. (2014).
Brain Injury: Prevalence at HCH Baltimore

- No TBI/LOC: 16%
- TBI no LOC: 18%
- LOC <30: 24%
- LOC 30" - 24': 26%
- LOC > 24': 16%

N = 77

68% with a TBI with some form of LOC
Brain Injury: Prevalence at HCH Baltimore

Coincidence of Mental Health Diagnosis by Level of LOC

- No TBI/LOC: 91.7%
- TBI no LOC: 92.9%
- LOC <30: 90.0%
- LOC 30" - 24': 88.9%
- LOC > 24': 100.0%
- All: 92.1%
Brain Injury: Prevalence at HCH Baltimore

Coincidence of Substance Abuse Disorder by Level of TBI LOC

- No TBI/LOC: 63.6%
- TBI no LOC: 69.2%
- LOC <30: 77.8%
- LOC 30" - 24': 93.8%
- LOC > 24': 91.7%
- All: 80.0%
Screening for Brain Injury

Options for screening:

• Brain Injury Screening Questionnaire
• HELPS Brain Injury Screening Tool
• Ohio State University TBI Identification Method
• Neuropsych evaluation
• Repeatable Battery for Assessment of Cognition (RBANS)
Screening for Brain Injury: OSU TBI-ID

Available at: [http://www.brainline.org/content/2013/08/new-tbi-screening-tool.html](http://www.brainline.org/content/2013/08/new-tbi-screening-tool.html)
OSU TBI-ID: Documenting Results

Ongoing problems likely if:

**FIRST:** TBI with loss of consciousness before age 15

**MULTIPLE:** 2 or more TBIs close together, including a period of time when they experienced multiple blows to the head even if apparently without effect

**RECENT:** A mild TBI in the last weeks or a more severe TBI in the last months

**OTHER Sources:** Any TBI combined with another way that their brain function has been impaired

Worst Injury (1-5):

1 = no history of TBI

2 = mild TBI without loss of consciousness, but with dazed and/or memory lapse

3 = mild TBI with loss of consciousness < 30 minutes

4 = moderate TBI with loss of consciousness 30 minutes-24 hours

5 = severe TBI with loss of consciousness >24 hours
OSU TBI-ID: Practice

With a partner, practice using the OSU TBI-ID to screen for a history of brain injury.

Discuss or practice writing how you would document and/or communicate the results of the screening.
The Pilot Program

Training consisted of:

- Learning the OSU TBI-ID
- WHO Disability Assessment Scale (WHODAS 2.0)
- SMART goal writing
- Strategies and skills specific to needs of individuals with BI
- Total of 8 trainings that occurred during lunch hour
Staff perceptions prior to the training:

Comfort Level in Addressing the Needs of Clients with Brain Injury

1 - 10 scale

Scale: 1 – not at all comfortable, 5 – Somewhat comfortable, 10 – very comfortable
Staff perceptions prior to the training:

Comfort in Assessing History of Brain Injury
1 - 10 scale

Number of providers

Scale: 1 – not at all comfortable   5 – Somewhat comfortable   10 – very comfortable
Staff perceptions prior to the training:

Current MH Intervention Methods

- None Specific
- Narrative Therapy
- Motivational Interviewing
- DBT
- Mindfulness Based Interventions
- Solution Focused Therapy
- CBT
- ACT

Number of responses:

- Used with individuals with BI
- Interventions generally used
Staff perceptions prior to the training:

**Effectiveness of Interventions Used for Individuals with BI**

1 - 10 scale

Scale: 1 – not at all effective  
5 – somewhat effective  
10 – very effective

Number of providers
Staff perceptions prior to the training:

Familiarity of SMART Goals for Treatment Planning
1 - 10 scale

Scale: 1 – not at all familiar    5 – somewhat familiar    10 – very familiar
WHODAS 2.0

Cover 6 domains of functioning:

Cognition-understanding and communication.

Mobility-moving and getting around.

Self care-Hygiene, dressing eating, and staying alone.

Getting along-social interactions.

Life activities-domestic responsibilities, leisure, work school.

Participation-joining in community activities.
WHODAS 2.0

Total of 21 clients received a WHO-DAS after a positive screen for TBI on the OSU-TBI ID

Average Score Among Participants

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<thead>
<tr>
<th>Category</th>
<th>Average Score</th>
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<tr>
<td>General disability score</td>
<td>30%</td>
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<tr>
<td>Getting along with people</td>
<td>35%</td>
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<tr>
<td>Getting around</td>
<td>25%</td>
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<tr>
<td>Household</td>
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<td>Participation in society</td>
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<td>Self-care</td>
<td>15%</td>
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<tr>
<td>Understanding and communicating</td>
<td>45%</td>
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</table>
WHODAS 2.0

Overall, providers felt:

– It was helpful in determining problem areas/goals for treatment plan (8/10 on Likert scale)
– It was generally easy to administer (8/10 on Likert scale)

They also suggested it:

– Complemented other screens well
– Addresses problems with clients with brain injury
– Was short enough to implement within a session

Ways it was not helpful:

– Would be easier to implement in parts instead of all at one time
– Difficult to complete along with other required screens; desire to not “over screen” and “over assess” clients
– 3 month interval was not long enough
SMART Goals

• When developing goals for clients with TBI it is important to use SMART goals.

• SMART goals are more helpful for clients because they are better able to show progress, and clinicians can more easily see what is working and what is not.

• SMART: Specific, Measurable, Action Oriented, Realistic, and Time Sensitive.
SMART Goals

Examples

Goals for client’s working on communication could be:

• I will ask on topic questions in conversations.
  SMART: I will ask on topic question in conversations once a week.

• I will not interrupt during a 15 minute conversation.
  SMART: I will interrupt less than 4 times in a 15 minute conversation.

• I will introduce myself to strangers.
  SMART: I will introduce myself to one person once a week.

• I will be able to identify emotions in pictures.
  SMART: I will be able to identify 3 of five correct emotions from pictures in sessions, during each session.

(Haskins et al., 2012)
Mr. John Doe presents for treatment for multiple issues involving memory, concentration, and impulsivity. He reports he has been having difficulty focusing on anything for more than a few minutes at a time, and described this causes ongoing frustration in his personal life. He reports ongoing memory problems, and says he is often unable to make appointments, because he forgets and is only reminded later by his provider. He says he can remember things with reminders from friends and family, but they are not always available to assist him. He has also been experiencing impulsivity and emotional outbursts. He says “It is not who I want to be, but I get so upset and just go off.” He reports this has caused many problems in his interpersonal relationships. He said he has been feeling depressed because of these problems and is unsure how to fix them.
The Training Sessions

Topics covered included:

• Building insight/levels awareness
• Attention
• Memory
• Communication
• Executive Functioning
• Strategies for teaching and learning
Types of Strategies

• When looking at which therapeutic strategies would best fit in the treatment of TBI, we noticed that **Cognitive Behavioral Therapy** and **Acceptance Commitment Therapy** were both a good fit. Each helps clients develop more flexibility and self acceptance.

• **Cognitive Behavioral Therapy**: Focused on cognitive flexibility, which many client with brain injury have difficulty with.
  – The Beck Institute describes the therapy as: “A time-sensitive, structured, present-oriented psychotherapy directed toward solving current problems and teaching clients skills to modify dysfunctional thinking and behavior.”
    
    [https://www.beckinstitute.org/get-informed/what-is-cognitive-therapy/](https://www.beckinstitute.org/get-informed/what-is-cognitive-therapy/)

• **Acceptance Commitment Therapy**: Focuses on acceptance of self and circumstances, accepting what we cannot control, and working toward a valued way living. It helps clients accept problems as they come and learn to exist with emotions, thoughts and circumstances by using mindfulness.
Types of Strategies

External Strategies:
- Received from an outside source
- Can be beneficial despite level of awareness
- Example: May have some recognition of missed appointments, is most likely to attend appointments when receiving a reminder phone call the day before

Internal Strategies:
- Self-directed
- Requires higher level of awareness
  - Example: Recognizes need to use calendar, checks calendar at the same time daily to plan for upcoming appointments
- Type of cuing used will depend on client’s awareness of problem/deficit areas
- External cues are generally easier to learn and apply first
- External cues may eventually be internalized with practice and learning
Insight and Awareness

• Intellectual Awareness – individual is able to understand at some level, that a particular function or functions is impaired. A greater level of intellectual awareness is required to recognize some common thread in the activities in which they have difficulty.

• Emergent Awareness – individual is able to recognize a problem when it is actually happening. To do so, they must recognize a problem exists (intellectual awareness), and realize when it occurs.

• Anticipatory Awareness – individual is able to anticipate a problem will occur and plan for the use of a particular strategy or compensation that will reduce the chances that a problem will occur, e.g. keep and refer to a calendar to support memory for daily schedule.

(Crosson et al., 1989)
Insight and Awareness

• What works:
  • Education on how injury and experiences may lead to certain difficulties
  • Standard rapport building
  • Establishment of therapy as a support to achieve goals
  • Identifying external motivators
  • Examining if it lack of insight vs. lack of acceptance
  • Understanding that the part of the brain that allows for insight and self-reflection is what was injured

• What doesn’t work:
  • Direct confrontation
  • Exposure in front of others (e.g. groups)
  • Not involving client in goal setting and therapeutic process

(Haskins et al., 2012)
Insight and Awareness

Assess for Insight:

• You may be able to clinically observe if client’s interactions and performance do not match their report.

• Have client self-rate performance before and after a task; does self-assessment match observed performance?

• Client may provide non-linear reasoning or excuses for why things did or did not occur, and may often externalize this and identify barriers in other people, environments, etc.
Insight: External Strategies

• Gather data regarding problem areas to help develop awareness that a difficulty may exist.
  – Data should be observable and easy to identify by client and provider
  – Tracking and recording the data should be consistent
  – Encourage client to write the information themselves to develop ownership of the process

• For specific problem areas, help client identify a tangible solution.
  – Client should agree with the goal; you may need to reframe the goal from their point of view
  – You may need to provide 2-3 options, all options should be things that are do-able
  – Focus on solutions, and stay away from over-analyzing past encounters if client is unable to process how they might have contributed to the problem.
  – Reflect on observable actions and behaviors differed when they met success vs. when they didn’t.

(Haskins et al., 2012)
**Insight: External Strategies**

- Allow client to attempt a task with their strategies and methods
  - If their attempt is not successful, offer strategies without indicating their way was incorrect
  - Compare performance, and see if they are able to recognize that the strategy was a more effective method
  - Encourage the strategy for additional situations
  - Explore client’s use of strategy, and discuss why the strategy might be needed

- Directly link the action to desired outcome or use rewards
  - For less insight, limit time between action and reward if possible
  - Explain how actions relate to the client’s desired goal
  - Keep these instructions concise and repeat them consistently

(Haskins et al., 2012)
Insight: Internal Strategies

• Internal strategies can start to be used if the above strategies are successful, or if the client is able to recognize when there is a problem, but not necessarily their ability to change it.

Therapies which can contribute to developing internal strategies:

• **Motivational interviewing**: Clients can learn to visualize goals, and connect how behavior can affect goal achievement.

• **ACT**: Focusing on the acceptance aspect of ACT and helping clients to begin to identify the struggle they may have with limitation. Looking at why they struggle, what the struggle costs them, and how acceptance can help them.
Learning and Teaching

Acquisition:

• Clients learn taught features of the treatment strategy
• Introduced materials and purpose of the intervention
• Addresses awareness of problems and need for strategies
• External strategies are most effective; clients may learn need to use strategies and internalize concepts

Application:

• Clients are able to apply strategies in structured and predictable environments
• External support and feedback are typically required
• The provider may continue to provide feedback on performance and ways to modify the strategy
• Client may begin to use external cues independently, and begin to use internal cues
• Benefits from continued practice with the frequency of external cues being reduced

Adaptation

• Clients are able to apply strategies to environments outside of sessions
• Focus is on internalizing and generalizing strategies
• Assigning “homework” is helpful to practice applying and generalizing strategies outside of sessions

(Haskins et al., 2012)
Learning and Teaching

**General teaching strategies:**
Repeat, repeat, repeat

- Repeat at different intervals to assess if client is able to recall information over periods of time
- Have client repeat information back to you instead of saying “yes” or “no”

Keep organization strategies to **1-2 strategies**, individuals should not use a calendar, pocket calendar, blue card, AND phone....

Have client use the strategies with you in the session to ensure they understand and can use the strategies.

- This also helps you assess generalization –
- E.g. if client has not written anything down in between sessions, they are likely not using the notebook strategy without cuing.

(Haskins et al., 2012)
Learning and Teaching: Errorless Learning

• Prevents individual learning information from making an error
• Idea is that not allowing errors causes the individual to learn and recall information correctly
• Without context or meaning, clients may guess answers and will not remember and distinguish correct from incorrect information

Strategies:
• Make a statement and have the person recall the statement without delay
  • “Your next appointment is Tuesday. What day is your next appointment?”
• Repeat information as much as necessary
• Cues may be needed throughout to prevent mistakes from occurring

(Haskins et al., 2012)
Learning and Teaching:

**Errorless learning** is useful when:

- Information to be learned/remembered is important such as:
  - Learning a phone number
  - Taking medication/understanding medication doses
  - Any information that you do not want the client to remember incorrectly!
- When individual presents with difficulty learning new information OR has less insight into deficits

**Spaced Retrieval:**

- Is useful if person has demonstrated ability to learn with errorless learning strategies
- Spaced retrieval is the same format as errorless learning, however, the person is asked to remember information over longer intervals of time.
  - E.g.: Therapist says “My name is Caitlin.” After one minute of discussion, therapist asks client what her name is.

(Haskins et al., 2012)
Learning and Teaching: Chaining

Is useful when an individual is learning a complex task or sequence of behaviors that need to be completed.

In chaining, completing one step is a cue to complete the next step. Even if task is not as meaningful, individuals can learn individual parts of task and learn to link them together.

Requires provider to identify steps of the task and break the larger task into smaller steps.

(Haskins et al., 2012)
Learning and Teaching: Chaining

Forward chaining:
• The provider teaches the client first step with as much cuing as necessary to complete step successfully. The provider then demonstrates the remaining steps.
• Once the individual is able to complete the first step, the provider presents the second step in the same way, providing as much cuing as needed.
• This progresses until client is able to complete task.

Example: Have the client open the calendar app on their phone. The provider shows the client the remaining steps to enter in the appointment into their phone.
• What would be the next step?

(Haskins et al., 2012)
Learning and Teaching: Chaining

*Backward chaining*:  
• The same method as forward chaining is used, however, instead the provider does the beginning steps, and supports the client to complete the last step of the task.

• As the client is able to learn the last step, the provider may then instruct the individual to learn the next to last step. In both cases, as much cuing as necessary is provided for successful completion.

(Haskins et al., 2012)
Learning and Teaching: Chaining

When to use backwards vs forward chaining:

• Forward chaining can support the individual in learning to initiate tasks

• Backward chaining is more rewarding as person feels successful at the end - and thus may be more motivating.

• If one part of task is more important that the other parts... consider teaching the step with most importance.

Example: When cooking, have individual turn off the oven as the last step. This step is continually reinforced as the client will continue to practice this when learning other steps. The provider would likely use backwards chaining.

(Haskins et al., 2012)
Attention

**Attention**: Ability to control focus (to engage and disengage) despite presence of internal and environmental stimuli

**Types of Attention**

**Focused attention**: basic level of attention, ability to recognize and acknowledge sensory information

- E.g. ability to recognize someone calling their name

**Sustained attention**: ability to maintain attention over a period of time

- Often what we address the most when we are talking about attention
- E.g. Reading a chapter of a book

(Haskins et al., 2012)
Attention

Selective attention: ability to process information selectively and inhibit responding to unnecessary information
  – E.g. Reading while listening to music or having the TV on

Alternating attention:
  – Ability to shift focus between tasks or activities that have different cognitive or behavioral demands
  – E.g. While reading, hearing the phone ring and able to answer it and have a conversation

Divided attention: ability to respond to two or more events at the same time
  – Listening to the news while reading a magazine, able to identify what news is important while comprehending the magazine

(Haskins et al., 2012)
Attention

- Attentional difficulties can be present with mental health symptoms, learning disabilities, and brain injuries.
- It is possible to experience one or multiple types of attention deficits.
- Attention is an underlying skill necessary to build memories, internal awareness, and recall.

Assessment of Attention

- Can be formally assessed on various cognitive screening tools and/or assessments.
- Can also informally assess attention by timing how long an individual can stay on one topic or activity.
- Can informally assess by giving client information, written or verbal, and asking them to rephrase the information in their own words.
- Person is able to complete multiple steps in an organized and systematic way.
- Performance declines when the environment is more distracting.
Attention: External Strategies

• Set timers when person is engaged in activity. When timer goes off, have them assess and check-in
  – “Am I still paying attention?”
  – “When did I lose focus?”

• Use strategies to help re-focus or get back on track
  – Taking small breaks when attention decreases
  – Breaks can include: deep breathing, stretching, shifting positions

• You can use timers to help person shift from topic to topic
  – “We have ten minutes to talk about A, then 10 minutes to talk about B, etc”
  – Use the timer and set boundaries to help with transitions
  – “In 5 minutes we are going to end our session...”

(Toglia, 2015)
Attention: External Strategies

• Before starting a task, help client write out the steps they need to complete the activity
  – Client can repeat steps out loud to themselves
  – Client can use written list as a cue as to what to do next
  – Break steps into small reminders or divide steps over multiple days
    • Phone alarms are great for this
    • Have person complete steps one at a time

• Minimize distractions
  – In office, reduce visual clutter for client
  – Turn down phone (if able) to minimize interruption of ringer
  – When reading text-heavy information, cover up unneeded parts of the page with blank piece of paper

(Toglia, 2015)
Attention: External Strategies

• Provide cues to help focus on important information
  – Highlight important information to draw attention
    • E.g. On medication bottle highlight “Take with food”
  – Color code items or paperwork
    • E.g.: SSI information goes in the red folder, Medicare information goes in the green folder

• Help client prioritize
  – Use the “brain dump” strategy to have client express everything that is on their mind
  – From that list, pick 1-2 most important areas of focus
  – Refer to “brain dump” list later to identify next priorities
Attention: External Strategies

General Tips:

• Repetition is important!
  – Use consistent strategies for multiple weeks in order to build skills, self-monitoring, and to assess whether or not it is truly effective.

• If client’s skills are improving with consistent use of strategies, increase the demands/difficulty.
  – If client can sustain attention for 10 minutes with a timer, then move to 15 minute intervals
  – If client can focus in quiet environment, add distractions
  – Increasing demands will increase client’s ability to generalize and apply strategies outside of sessions

• Provide feedback to grow ability to self-monitor
  – “You said you wanted to talk about your relationship with your case manager today, but now we are talking about the food at Daily Bread. Let’s shift back to the case manager.”

(Haskins et al., 2012)
Attention: External Strategies

Help yourself with attention strategies.
Very disorganized clients can cause us to feel or act disorganized or become distracted ourselves!
Attention: Internal Strategies

Developing strategies for stress management/self-soothing, in order to not be frustrated, upset, overwhelmed, etc.

- Teaching clients to take 10 deep breaths can help them self soothe when upset.
- Teaching clients to take one deep breath before making a decision when upset, can help them to be less reactive.
- Teach a mantra that helps the client calm when upset or overwhelmed. Example: “It’s okay I feel this way, I won’t always feel this way.”
Attention: Internal Strategies

Mindfulness and Awareness:

• Teaching mindful meditation, and practicing with clients in session can help increase attention as well as help clients calm.

  – Example: Drinking tea in a session and asking the client to draw their attention to how it feels to drink tea, to notice the warm calming sensation. Then to notice the flavor of the tea as they exhale.

  • This is good for clients who struggle with more traditional forms of meditation.
Attention: Internal Strategies

Mindfulness and Awareness:

• When practicing meditation it is important for clients to buy into the activity. This can be done by doing a simplified explanation of how meditation affects the brain.
  – It is also important to note that not everyone will be able to practice meditation, especially clients who have more severe brain damage.
Attention: Internal Strategies

Sensory Strategies

• Clients can also practice grounding.
  – Example: Holding thumb in hand and focusing on how it feels.

• Other self-soothing techniques and stress management may be smelling a scent which is pleasant, or picturing a calming image.

• Clients may also benefit from using sensory strategies to increase alertness.
Post-Training Results

Comfort Level in Addressing the Needs of Clients with Brain Injury
1 - 10 scale

Scale: 1 – not at all comfortable  5 – Somewhat comfortable  10 – very comfortable
Post-Training Results

Comfort in Assessing History of Brain Injury
1 - 10 scale

- Pre-Training
- Post-Training

Scale: 1 – not at all comfortable   5 – Somewhat comfortable   10 – very comfortable
Post-Training Results

Effectiveness of Interventions Used for Individuals with BI
1 - 10 scale

Pre Training
Post Training

Scale: 1 – not at all effective  5 – somewhat effective  10 – very effective
Post-Training Results

Familiarity of SMART Goals for Treatment Planning
1 - 10 scale

- Pre Training
- Post Training

Scale: 1 – not at all familiar, 5 – somewhat familiar, 10 – very familiar
Post-Training Results

Comfort Level in Addressing Conditions
[Average of scores]

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<thead>
<tr>
<th>Skills</th>
<th>Pre Training</th>
<th>Post Training</th>
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<tr>
<td>Trauma</td>
<td>7</td>
<td>9</td>
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Scale: 1 – not at all comfortable  5 – somewhat comfortable  10 – very comfortable
Post-Training Results

“Understanding cognition and the other conditions associated with brain injury is useful to understand the client’s experience. Sometimes there is a sense that the client is at fault behaviors they cannot completely control.”

“I found that I still want to focus more on the behavioral/social in my sessions. Understanding the cognition really helped to see how this all fits together.”

“I would definitely recommend this training for other providers in the clinic since we are all working towards similar goals with the clients. Maybe a more condensed version.”

“I enjoy having concrete methods that target certain areas. Very realistic strategies.”
Case Study Example

Mr. C is a 61 year old man who came to HCH after a broken hip. He had been homeless for 2 years, most recently living in a tent.

Mr. C has a B.A. degree, and previously worked as a library assistant. He also spent 14 years in an Asian country teaching English. He worked for several years at a hostel where he also lived, and became homeless after losing his job there. He used to have close friends and be socially engaged and was now socially isolated. He has been diagnosed in the past and also by our clinic as having Major Depression and Generalized Anxiety Disorder. He has a history of alcohol use but doesn’t have an alcohol abuse diagnosis at the present time.

Mr. C currently has a lot of difficulty with his balance due to problems with all three systems that contribute to balance: difficulties with proprioception due to neuropathy, difficulties with vision due to double vision, and difficulties with the vestibular system due to vertigo. This is leading to his frequent falls and also contributes to his anxiety about his mobility.
Case Study Example

OSU-TBI ID

When completing the screening, at first Mr. C denied any brain injury, but when I asked about a coma he mentioned that he had been a coma for 1 week 15 years ago. While on an outing with family and friends, he had a seizure and was face down in 2 feet of water for several minutes before his friends found him. He said he was hospitalized, but doesn’t remember occupational therapy or follow-up care. He never mentioned this coma to any of his providers (mental health therapist, occupational therapist, doctor or psychiatrist). He didn’t find it to be very significant piece of information. Mr. C had difficulty remembering if his physical health or mental health problems developed or worsen after his accident.
Case Study Example

WHO DAS 2.0

On completing the WHO-DAS, Mr. C identified understanding and communicating, getting around, and participation in society as his major concerns. While it is possible that Mr. C’s anxiety predated his accident, it appears as though something changed, as in his youth he was someone who could complete an education, travel the world, and participate in social activities. The history of brain injury appears to give some clues into the decline in Mr. C’s functioning that didn’t appear connected to his mental illness or substance use.

Based on the results of the OSU TBI-ID and the WHO DAS 2.0, what types of SMART goals might you work on with Mr. C?

What strategies would you use for your treatment sessions?
Case Study Example

SMART GOALS

Using the SMART goal format, I changed my approach in therapy to break down his anxiety into very specific contexts. Previously, I talked about his anxiety in a more general context. The first area we focused on was not rushing getting when using Mobility Transportation. Mr. C uses a walker and needs to be careful when getting into the van, but he often rushed due to his anxiety. He was able to use step by step instructions, self-talk, relaxation techniques, and visualization in order to slow down and to not rush.
Case Study Example

TREATMENT PROGRESS

Despite his first success, he was not able to generalize these skills to other contexts. We next focused on other specific areas of anxiety, such as using the telephone. We continue to focus on specific areas of concerns. As a result, Mr. C is improving his sense of self-efficacy and has recently tried yoga, a new activity for him.
Additional Resources

NHCHC Adapted Clinical Guidelines on the Diagnosis and Treatment of TBI for Unstably Housed Patients

Brainline Resource Page: www.brainline.org
• Resources for practitioners, families, and individuals with brain injury

OSU TBI ID: http://ohiovalley.org/tbi-id-method/
• Includes history of the development of the OSU TBI-ID
• Webinars and video instruction

American Congress of Rehabilitation Medicine: http://acrm.org/
• Cognitive Rehabilitation training
• Annual Conference
• Published manuals
Questions
References


