



Psychosocial Interventions for PTSD and TBI

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Psychosocial Interventions: TBI

Cognitive Domains Affected by TBI

- ◆ Memory
- ◆ Attention
- ◆ Processing speed
- ◆ Communication
- ◆ Executive functioning
 - Control/regulate other abilities and behaviors
 - Initiate and stop actions
 - Monitor and change behavior as needed
 - Plan future behavior when faced with novel tasks and situations
 - Anticipate outcomes and adapt to changing situations
 - Form concepts and think abstractly

Goals of Cognitive Rehabilitation

- ◆ Restore functions that can be restored
- ◆ Adapt to functional changes
 - Maximize strengths, bypass weaknesses
- ◆ Works best when linked to an individual's specific cognitive and behavioral changes

CogSMART (Twamley)

- ◆ **Manualized, 24-hour class**
 - 1-2x per week
 - Led by a trained clinician
 - 2 hour sessions: 1st hour learn technique, 2nd hour individual application
- ◆ **Teaches participants to compensate for cognitive difficulties:**
 - Prospective memory (i.e., “remembering to remember”)
 - Attention and concentration
 - Learning and memory
 - Problem-solving

Examples of CogSMART Training

Targeted Domain	Examples of Importance of Domain at Work/School or for Independent Living	Specific Compensatory Strategies and Habits in CogSMART Cognitive Training
Prospective Memory	<ul style="list-style-type: none"> Remembering to go to meetings at work Remembering to go to appointments Remembering to do assigned tasks at work in response to cues 	<ol style="list-style-type: none"> Daily calendar use using paper calendars or Palm Pilots Using watches or cell phone alarms to cue behaviors To-do lists and prioritizing tasks Linking tasks or using "can't miss reminders" to remember tasks
Attention and Concentration	<ul style="list-style-type: none"> Paying attention to communications from supervisors and coworkers Maintaining attention to work tasks or household projects without getting distracted 	<ol style="list-style-type: none"> Conversational vigilance skills (reduce distractions, eye contact, paraphrasing, and asking questions) Task vigilance skills (paraphrase instructions, use self-talk during tasks to maintain focus)

Examples of CogSMART Training

Targeted Domain	Examples of Importance of Domain at Work/School or for Independent Living	Specific Compensatory Strategies and Habits in CogSMART Cognitive Training
Learning and Memory	<ul style="list-style-type: none"> • Learning and remembering work tasks • Learning and remembering names of supervisors and coworkers 	<ol style="list-style-type: none"> 1. Encoding strategies (write things down, paraphrasing/repetition, association, chunking, categorizing, acronyms, rhymes, visual imagery, name-learning strategies) 2. Retrieval strategies (systematic searching) and organizational strategies for general learning and memory
Problem Solving and Cognitive Flexibility	<ul style="list-style-type: none"> • Problem solving and coping with unexpected situations on the job or at home • Being able to balance demands of work/school with home/family needs • Thinking flexibly and self-monitoring performance at work 	<ol style="list-style-type: none"> 1. 6-step problem solving method (define problem, brainstorm solutions, evaluate solutions systematically, select a solution, try it, evaluate how it worked) 2. Self-talk while solving problems 3. Hypothesis testing 4. Self-monitoring



Psychosocial Interventions: PTSD



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Exposure Therapy

- ◆ The only approach with demonstrated efficacy for treatment of PTSD

(Committee on Treatment of Posttraumatic Stress Disorder Board on Population Health and Public Health Practice, 2007)

- ◆ Components

- Education about PTSD
- Breathing technique for relaxation
- *In vivo* exposure to feared/avoided situations
- Imaginal exposure to trauma memory

- ◆ Mechanism: Extinction

Other Psychotherapies with Empirical Support for Treating PTSD

- ◆ Cognitive Therapy
 - E.g., Cognitive Processing Therapy (CPT; Resick)
- ◆ Coping skills training
 - E.g., Stress Inoculation Therapy (SIT; Michenbaum)
- ◆ Eye Movement Desensitization and Reprocessing (EMDR; Shapiro)

Seeking Safety (Najavits)

- ◆ Present-focused therapy to help people attain safety from trauma/PTSD and substance abuse
- ◆ Safety is the overarching goal (helping clients attain safety in their relationships, thinking, behavior, and emotions)
- ◆ Integrated treatment
- ◆ Initial results promising

Psychosocial Interventions: PTSD in the Context of TBI



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General Considerations

- ◆ **Allow additional time for treatment**
 - Learning may be slowed
 - Generalization may be difficult
- ◆ **Involve support people**
- ◆ **May need to address behavioral control**

Exposure-based CBT

- ◆ Case studies and one small RCT provide support
- ◆ Loss of memory for parts of the traumatic event may be problematic in conducting imaginal exposure
- ◆ *In vivo* exposure may be useful to address implicit or “situationally accessible” memories
- ◆ Cognitive procedures may be an important adjunct

Computerized CBT

- ◆ Allows for presentation in more than one modality
- ◆ Allows for personalization of treatment materials

Pleasant Events Project (PEP; Mausbach)

- ◆ **Based on Behavioral Activation (BA)**
 - Initial trial suggests BA is acceptable to patients with PTSD (Jakupcak et al., 2006)
 - Effective at improving functional skills in schizophrenic patients (Patterson et al., 2006)
- ◆ **12 group sessions**
 - Sessions 1-5: education about PTSD and its effect on moods and quality of life. Develop life goals and identify activities that will help them more readily engage with their environment.
 - Sessions 6-12: Learn basic functional skills as necessary and incorporate these skills into their daily behavioral activation routine