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Evidence-Based Interventions for Impairments of Social Communication

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Improving lives through interdisciplinary rehabilitation research

DISCLOSURES

Michael R. Fraas, Ph.D. CCC-SLP

Financial Disclosure: Dr. Fraas is an Associate Professor in the Department of Communication Sciences and Disorders at Western Washington University and receives a salary.

Non Financial Disclosure: Dr. Fraas has no relevant non-financial relationships to disclose.

DISCLOSURES

FIRM and ACRM staff have no financial or other interest to disclose.

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of The Institute for Medical Studies and the American Congress of Rehabilitation Medicine. The Institute for Medical Studies is accredited by the ACCME to provide continuing medical education for physicians.

Behavioral – Learning Objectives

At the conclusion of the activity, participants will be able to:

1. Use a decision-tree to assist in determining which type of cognitive rehabilitation to implement;
2. Describe techniques for improving attention and the steps involved in carrying out treatments;
3. Identify the general guidelines for the use of external memory strategies;
4. Describe a general algorithm and conceptual framework for structuring interventions for awareness, executive functioning and behavioral / emotional self-regulation;
5. Discuss the evidence concerning the effectiveness of cognitive rehabilitation in the selection; and implementation of specific, individualized interventions for cognitive disability.

Obtaining CME Credit

Credit is only given to attendees that sign-in for the course; successfully complete the entire course; and evaluate the course.

At the close of the workshop, you will receive an email with a link to the evaluation system. Please click on the link and begin to evaluate.

After you have completed the evaluation, an email will automatically be generated to you. In that email, you will be able to click on the link and print your certificate.

The evaluation system will close 30 days after the date of the workshop.

Learning Objectives

At the conclusion of this activity, participants will be able to:

- Define and give examples of deficits in social communication after TBI.
- Identify the stages for goal setting and goal review for social communication skills.
- State the structure and format procedures for group treatment for social communication skills.

Core Terms



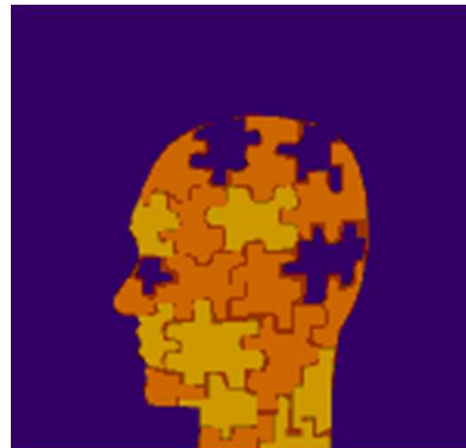
- Social Communication Skills – (Dahlberg et al 2007)
 - “involve a complex interaction of cognitive abilities, self-monitoring of speech and language skills, awareness of social rules and boundaries, and emotional control”
- Emotional Perception (Bornhofen & McDonald 2008 ₁)
 - “the accurate decoding and interpretation of visual and aural stimuli that signal one of six emotional states: happiness, sadness, anger, fear disgust & surprise”

Deficits in Social Communication

- Impact success with: (Hawley & Newman, 2006)
 - Communicating needs and thoughts
 - Listening and understanding others
 - Giving and interpreting nonverbal communication
 - Regulating emotions in social interactions
 - Following social boundaries and rules
 - Working with others to solve tasks, and
 - Being assertive

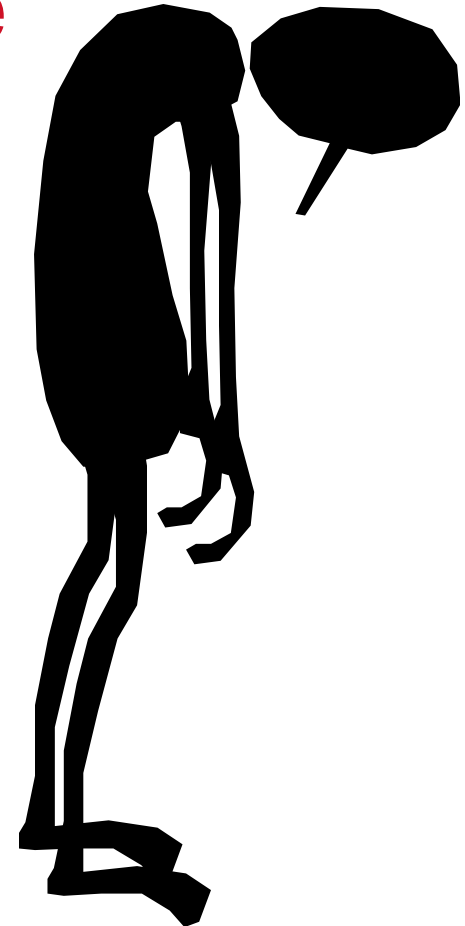
Cognitive and Emotional Issues

- Slowed info processing
- Executive dysfunction
- Memory deficits
- Impaired emotional interpretation
- Reduced self-esteem
- Anxiety
- Depression



Impact into daily life

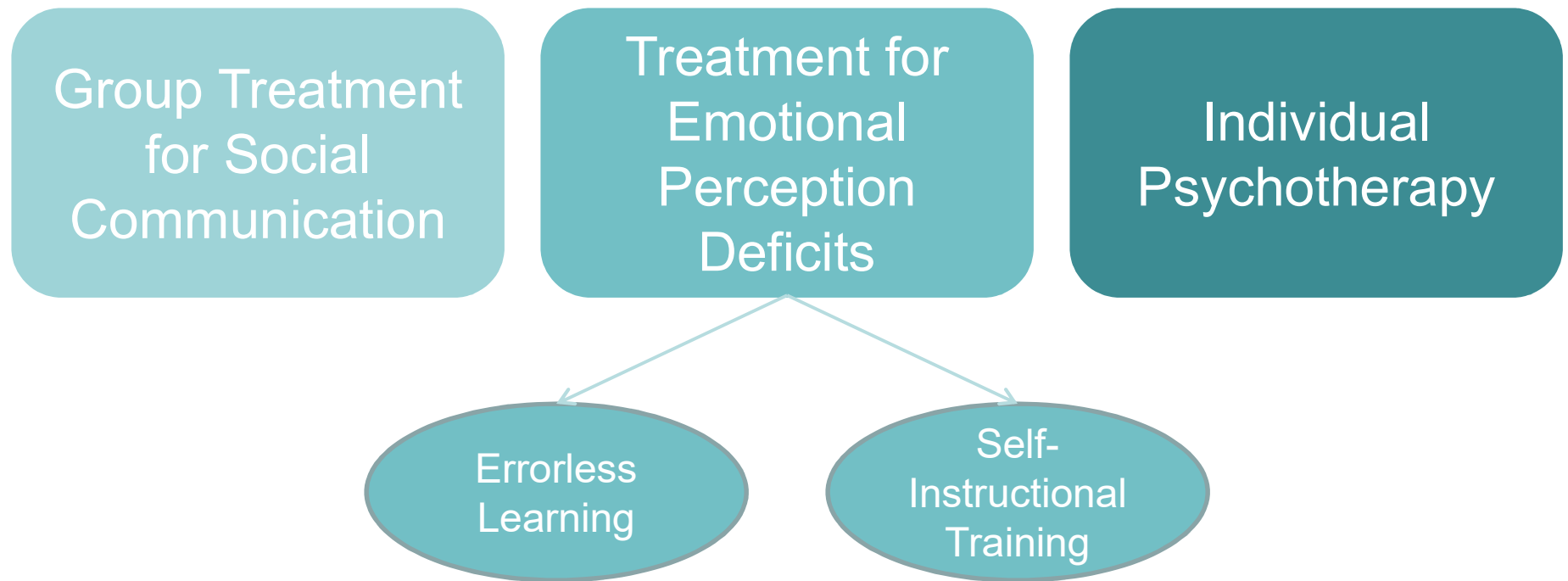
- Fewer employment opportunities
- Poorer quality of life, decrease in life satisfaction
- Problems in social relationships
- Reduced community integration with social isolation
- Higher risk for depression



What the Evidence Supports: Recommendations by ACRM BI-ISIG

- **Practice Standard** – “Specific interventions for functional communication deficits, including pragmatic conversational skills, are recommended for social communication skills after TBI”
- **Practice Option** – “Group based interventions may be considered for remediation of language deficits after left hemisphere stroke and for social-communication deficits after TBI.”
 - Cicerone et al., 2011

Translating Directly Into Clinical Practice



Remediation for Communication Deficits after TBI

- *Dahlberg et al., 2007 (Class I)*
- Significant benefits apparent on
 - Functional Communication (blind objective ratings)
 - Social Communication Skills (self-report)
 - Individual social communication goals
- Gains maintained at 3- and 6-month follow-up
- Improved life satisfaction at 3- and 6-month follow-up

Group Treatments for Social Communication Deficits

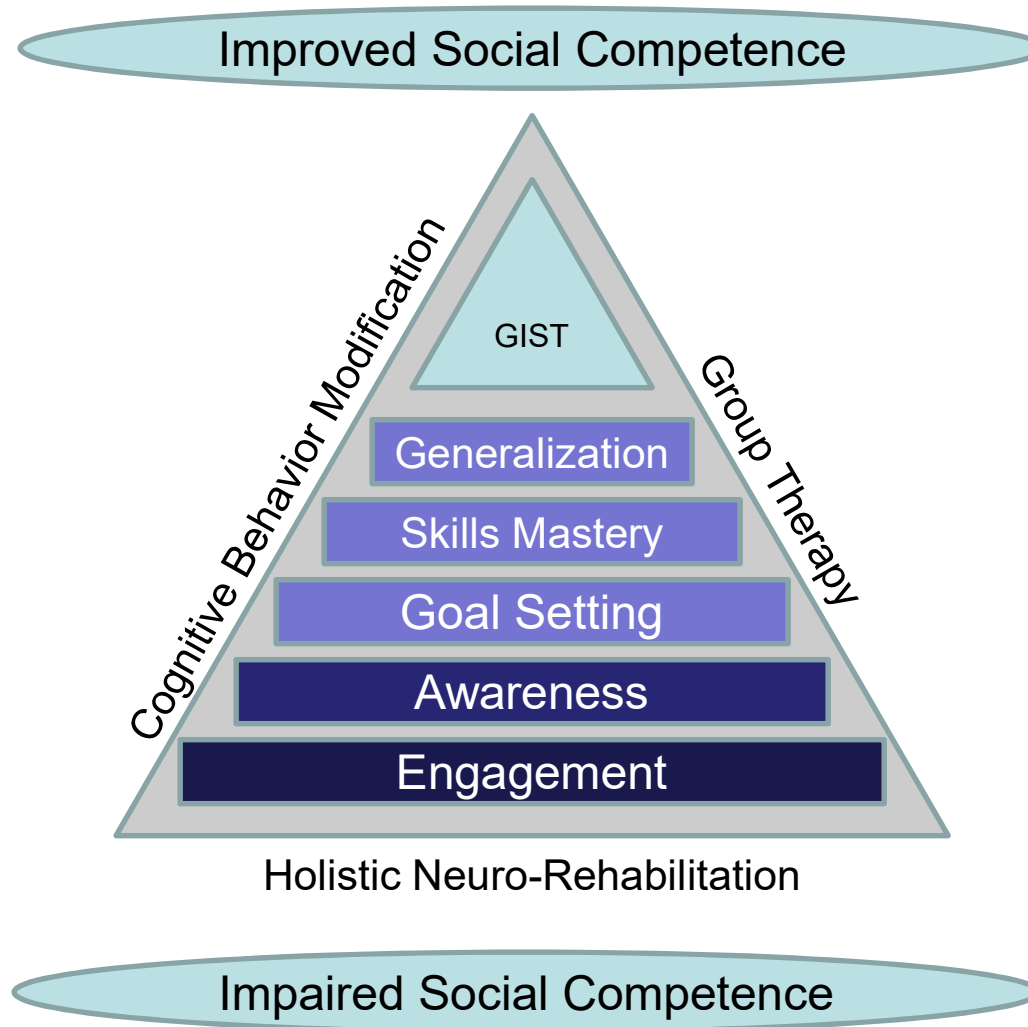
- Group Treatment:
 - Hawley & Newman (2006, 2008, 2010). *Group Interactive Structured Treatment-GIST: for Social Competence*, Hawley and Newman, (2006, 2008), www.braininjurysocialcompetence.com
- Treatment of Emotional Perceptual Deficits:
 - McDonald and colleagues (2008). *Improving First Impressions: A Step-by-Step Social Skills Program*, McDonald et al., (2009), <http://www.assbi.com.au/resources/ImprovingFirstImpressions.pdf>

Social Skills Training and TBI

Hawley & Newman, 2003, 2006, 2010

- Follows a holistic approach to address patient needs
- Emphasis on self-evaluation and goal setting
- Emphasis on the group process:
 - Structured interaction, immediate feedback
- Social problem solving
- Repetition, reinforcement, and feedback
- Generalization: Family involvement

Group Interactive Structured Treatment (GIST) (Hawley & Newman, 2010)



GIST: Social Communication Skills Checklist

(Hawley & Newman, 2010)

- Do you feel uncomfortable in many social situations?
- Do you have trouble staying focused in a conversation?
- Do you have trouble taking turns in a conversation?
- Do you have trouble thinking of things to talk about?
- Do you have trouble controlling your temper?
- Do you have any other social skills problems?

Group Process

- Ideal Group size = 4-8 participants
- Co-group leaders from different backgrounds; e.g. speech pathology/social work.....
- Advantages:
 - Structured interaction with immediate feedback
 - Practice newly learned/modified social skills
 - Provides “safe” network of support, with peers; sense of belonging
 - Universality
 - Positive social reinforcement = confidence

Individual Goal Setting

- Each member has own set of goals for group participation.
- Emphasizes self-awareness & self-assessment
- Goal setting process
 - Collaborative with clinician, client and family
 - Set during initial group sessions
 - Personally relevant
 - Steps to achieving goal are identified
- Examples

Goal Attainment Scaling (Malec, 1999; Turner-Stokes, 2009)

http://www.marson-and-associates.com/GAS/goal_attainment_scaling_excel.html

GOAL ATTAINMENT SCALING		date:		9/18/2017					
client ID	Lisa	goal 1		goal 2		goal 3		goal 4	
		Eye contact		Joint attention		Verbal reciprocity		Turn taking	
		rating	Weight	rating	Weight	rating	Weight	rating	Weight
scale value			4		8		9		4
									Total
									25
2	Much more than expected level of outcome	X	always looks at listener		describe measurable level here	X	describe measurable level here		describe measurable level here
1	Somewhat more than expected level of outcome		sometimes looks at listener	X	describe measurable level here		describe measurable level here		describe measurable level here
0	Expected level of outcome		looks at listener when prompted		describe measurable level here		describe measurable level here		describe measurable level here
-1	Somewhat less than expected level of outcome		looks at listener once or twice a session		describe measurable level here		describe measurable level here	X	describe measurable level here
-2	Much less than expected level of outcome		never looks at listener		describe measurable level here		describe measurable level here		describe measurable level here
	actual level now		2		1		2		-1
	weighted actual level now		8		8		18		-4
								composite total weighted levels	30.00

GIST: Session Format

(Hawley & Newman, 2010)

Session Format

- Reconnect
- Review goals, progress, homework
- Introduce new topic – guided discussion
- Break
- Practice new skills – may break into small group practice with therapist modeling and/or role play
- Problem solve/feedback, and
- Assign new homework



Group Interactive Structured Treatment (GIST)

Hawley & Newman, 2010

- Orientation
- Skills of the Great Communicator
- Completing a self-assessment and setting goals
- Starting conversations
- Keeping conversation going and using feedback
- Assertiveness and solving problems
- Practice in the community
- Developing social confidence
- Setting and respecting social boundaries
- Video Taping and social problem solving
- Video feedback and review
- Conflict resolution
- Closure and celebration



Group Feedback

- Frequent
- Encouraged from all participants; not driven by the group leader/facilitator
- Group Leaders model appropriate methods of delivering feedback
- Feedback
 - Balanced
 - Observational
 - Questioning



Final Group Considerations

- Extensive practice & repetition of target behaviors and strategies needed for new learning
- Self-Monitoring = fostering independence
 - WSTC (McDonald et al, 2008)
 - What am I doing?; What's the best Strategy? Try it! Check it out!
- Family members are critical!
 - Input for goals; written feedback; community practice
- Generalization
 - Homework
 - Community outings



3 primary anticipated Outcomes from Social Skills group participation

- Specific social communication skills improvement, for example,
 - General participation in conversation
 - Improved topic relevancy
 - Clarity of expression
- Improved satisfaction with life, per SWLS
- May continue to make improvements in social communication goals post group participation

Dahlberg et al, 2007; 2010

Treatment of Emotion Perception Deficits

- Aim = improve ability to recognize & interpret others' nonverbal cues – facial expressions, affective tone, gestures, body posture, proximity.
- In learning, cues are hierarchically organized:
 - Knowledge base
 - Judge static emotional cues from line drawings, then photographs, to videos
 - Presented in one modality, then multiple modalities
- Final goals include making social inferences about speaker's intentions, truthfulness, emotional state; interpretation of situational cues.

Treating Deficits in Emotion Perception After TBI

Bornhofen & McDonald, 2008a, 2008b

- Decreased social communication may reflect an inability to appreciate and monitor social cues
- “Individual” treatment in groups of 2 or 3 participants

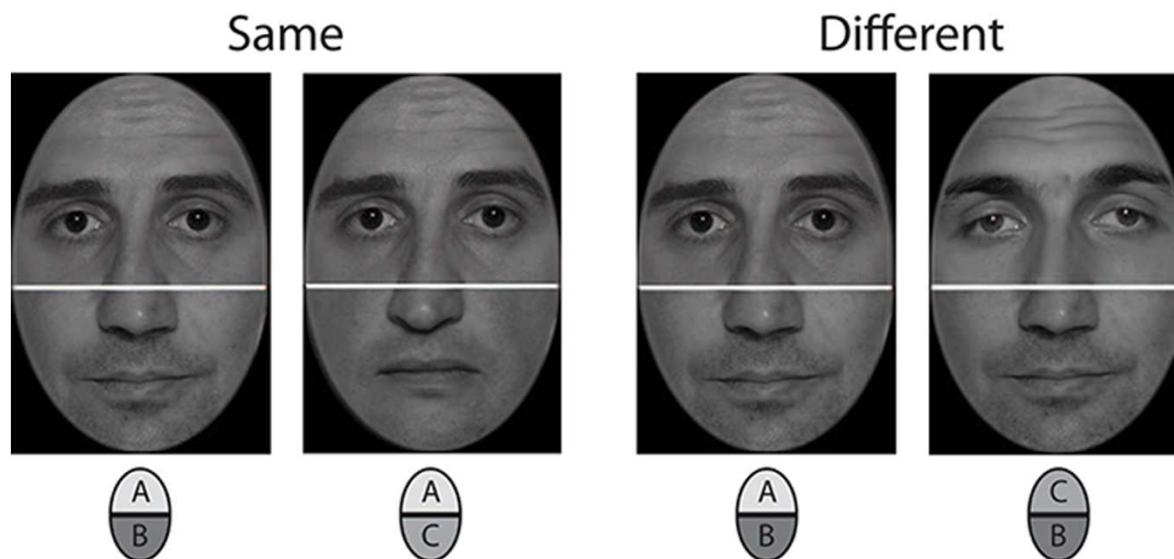
Treating Deficits in Emotion Perception After TBI

Bornhofen & McDonald, 2008a, 2008b

- Interpreting conventional emotional contexts
 - (e.g. birthday party vs. funeral)
- Judging static visual emotion cues
- Judging dynamic emotional cues
 - Therapist modeling
 - Role play and videotaping
- Making social inferences based on emotional demeanor and situational cues

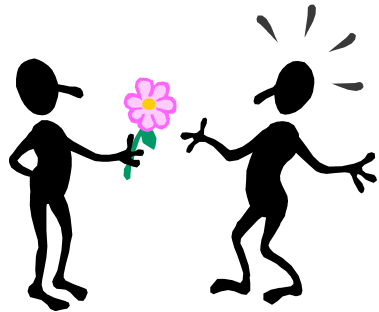
Formal Measures of Emotional Perception

- *The Facial Expression Same/Different Task* (Green et al, 2004)
- *The Facial Expression Naming Task* (Hornak et al, 1996)
- *The Facial Expression Matching Task* (Croker & McDonald, 2005)
- *The Awareness of Social Inference Test* (McDonald et al, 2003)

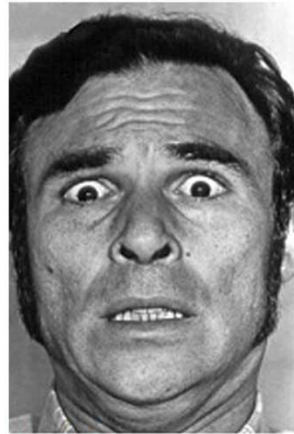


Errorless Learning to Improve Emotion Perception Skills

- Used with intact implicit memory functioning, but impaired explicit memory
- Repeated rehearsal and practice
- Instructed specifically NOT to guess
- Known to facilitate accurate encoding and retention of patterns of facial expression associated with specific emotions
- Procedures consistent with EL literature; as referenced in earlier presentation (Wilson, 2009).



- Start with easy discriminations
- Extensive practice
- Discourage guessing if unsure
- For example: “Wide eyes and raised eyebrows in surprise”



Fearful



Angry



Sad



Happy



Disgusted



Surprised







Self-Instructional Training in Treating Emotion Perception Deficits



- Verbalization of procedural steps.
- Learn to use self-guided statements to intensify attention, discriminate emotions, make decisions and correct errors.
- Assist with making social inferences on dynamic emotional and situations cues.
- Used toward end of treatment; key skills established

Self-Instructional Training

- Acronym – **WATER**
 1. **W**hat am I deciding about?
 2. What do I **A**lready know about it?
 3. **T**ry out my answer.
 4. **E**valuate how it went.
 5. **R**eward myself for having a go!

(Bornhofen & McDonald, 2008; delineated by Meichenbaum and Cameron, 1973)

Treating Deficits in Emotion Perception After TBI

Bornhofen & McDonald, 2008b

- Treatment benefits on emotion perception and social inferences
 - Evidence of practice effects
 - Contributions of both Errorless Learning and SIT
 - SIT benefits may be more apparent and more likely to be maintained and generalize

1-1 psychotherapy, supplementing group treatment programs

- Goals
 1. Facilitate adjustment to living with LT disability,
 2. Enhance coping skills
 3. Address mood issues – e.g. anxiety depression or reduced self-esteem
 4. Reinforce strategies/skills learned in group; further individualize and tailor for needs.
- Effective cognitive behavioral tx techniques: self-talk, awareness of emotional triggers and responses, relaxation training, record-keeping, & repetition.

Strategic and Tactical Goal Writing in Rehabilitation of Impairments of Social Communication



Long-Term Strategic Goal:

Mrs. PP will independently employ self-monitoring strategies to effectively participate in conversations with familiar communication partners.

Short-Term Tactical Treatment Goals

STGa: Mrs. PP will independently identify 4 strategies (e.g. ask a new question, pause, ask for more information....) to use during conversations for topic maintenance and equal partner talking opportunities.

STGb: Mrs. PP will demonstrate complete topic maintenance during a 3-5 minute conversation.

STGc: Mrs. PP will independently employ the use of pausing at least 2-3 times to facilitate conversational turn-taking during a 3-5 minute conversation.

Long-Term Strategic Goal:

Mr. CM will independently name the emotions represented in pictures of people

Short-Term Tactical Treatment Goals

STGa: Mr. CM will identify emotion of people in complex scenarios based on photographic stimuli with a choice of 6 text options with 90% accuracy

STGb: Mr. CM will identify common emotions associated with specific facial expressions with 90% accuracy.

STGc: Mr. CM will independently identify emotion in people in complex scenarios based on photographic stimuli with 90% accuracy.

.

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EP Internet Resources

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Thank You



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