



Managing Challenging Behaviors in Brain Injury

Rene' Mills, M.S., CCC-SLP, CBIST

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NEUROREHABILITATION
& RESEARCH HOSPITAL

Learning Objectives

- **1) Be able identify at least 3 types of maladaptive behaviors observed in traumatic brain injury.**
- **2) Describe the process of determining positive reinforcers for a patient.**
- **3) Describe at least two techniques for facilitating a target skill or behavior.**

Maladaptive behaviors

Aggressive/abusive behavior

Disinhibition

Irritability/low frustration tolerance

Impulsivity

Lack of personal hygiene



Non-compliance

Verbal Aggression

Lack of initiation/apathy

Disruptive behavior (yelling, spitting, cursing)

Revised Rancho Levels of Cognitive Functioning

- I. No response
- II. Generalized response
- III. Localized response
- IV. Confused, agitated, inappropriate
- V. Confused, inappropriate, non-agitated
- VI. Confused, appropriate
- VII. Automatic appropriate
- VIII. Purposeful and appropriate-SBA
- XI. Purposeful and appropriate-SBA on request
- X. Purposeful, appropriate, Modified Independent
Hagen, C. (1997)

Disorders of Consciousness

- Medical Management
- Environmental management
- Controlled stimulation documented by entire team
- Management of coma-emergent agitation
- Training of caregivers



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Level IV Rancho

- **Confused, agitated, inappropriate**
- **May have hallucinatory states**
- **Post-traumatic amnesia (absent short-term memory)**
- **Alert and heightened state of activity**
- **May exhibit aggressive behavior**
- **Verbalizations may be incoherent or inappropriate**

Level V Rancho

- **Confused, inappropriate, non-agitated**
- **May wander randomly or with a vague intent of going home**
- **Not oriented to person, place, or time**
- **Can converse on a social, automatic level for brief periods**
- **Severely impaired recent memory, confusion of past and present**
- **Unable to learn new information**

Level VI Rancho

- **Confused, appropriate**
- **Inconsistently oriented to person, time, and place**
- **Attends to highly familiar tasks in non-distracting environment for 30 min with moderate redirection**
- **Remote recall better than recent recall**
- **Unaware of deficits and safety risks**
- **Consistently follows simple directives**

Level VII Rancho

- Automatic appropriate
- Consistently oriented to person and place. Moderate assist for orientation to time
- Demonstrates carry-over of new learning
- Unable to think about consequences of decisions or actions
- Unaware of other's needs and feelings
- Unable to recognize inappropriate social interaction behavior

All behavior is “LAWFUL”

Rule governed

**Receive something
desired**

**Escape from something
unpleasant**



Stimulus
Added

Stimulus
Removed

INCREASES
likelihood
of behavior
repeating

POSITIVE
REINFORCEMENT
(+R)

NEGATIVE
REINFORCEMENT
(-R)

DECREASES
likelihood
of behavior
repeating

POSITIVE
PUNISHMENT
(+P)

NEGATIVE
PUNISHMENT
(-P)

ABC's of behavior

- Antecedent
- Behavior
- Consequence



Extinction

- *Actively ignoring a problem behavior
- *Usually rooted in attention seeking
- *Extinction burst phenomenon



Positive reinforcers

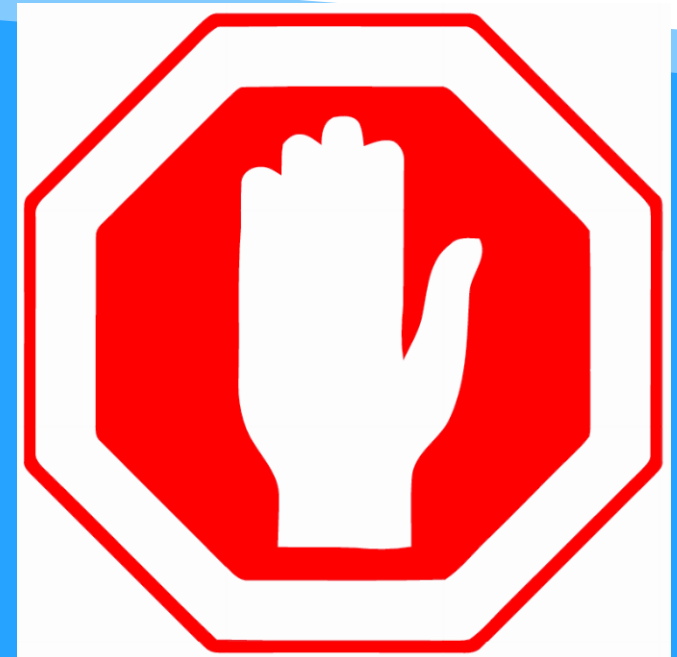


How to identify positive reinforcers

1. Ask the patient directly, if possible
2. Talk to family members about the patient's preferences
3. Observe the patient during down time

The Art of Setting Limits

- Explain which behavior is inappropriate
- Explain *WHY* the behavior is inappropriate
- Give reasonable choices with consequences
- Allow time
- Be prepared to enforce your consequences



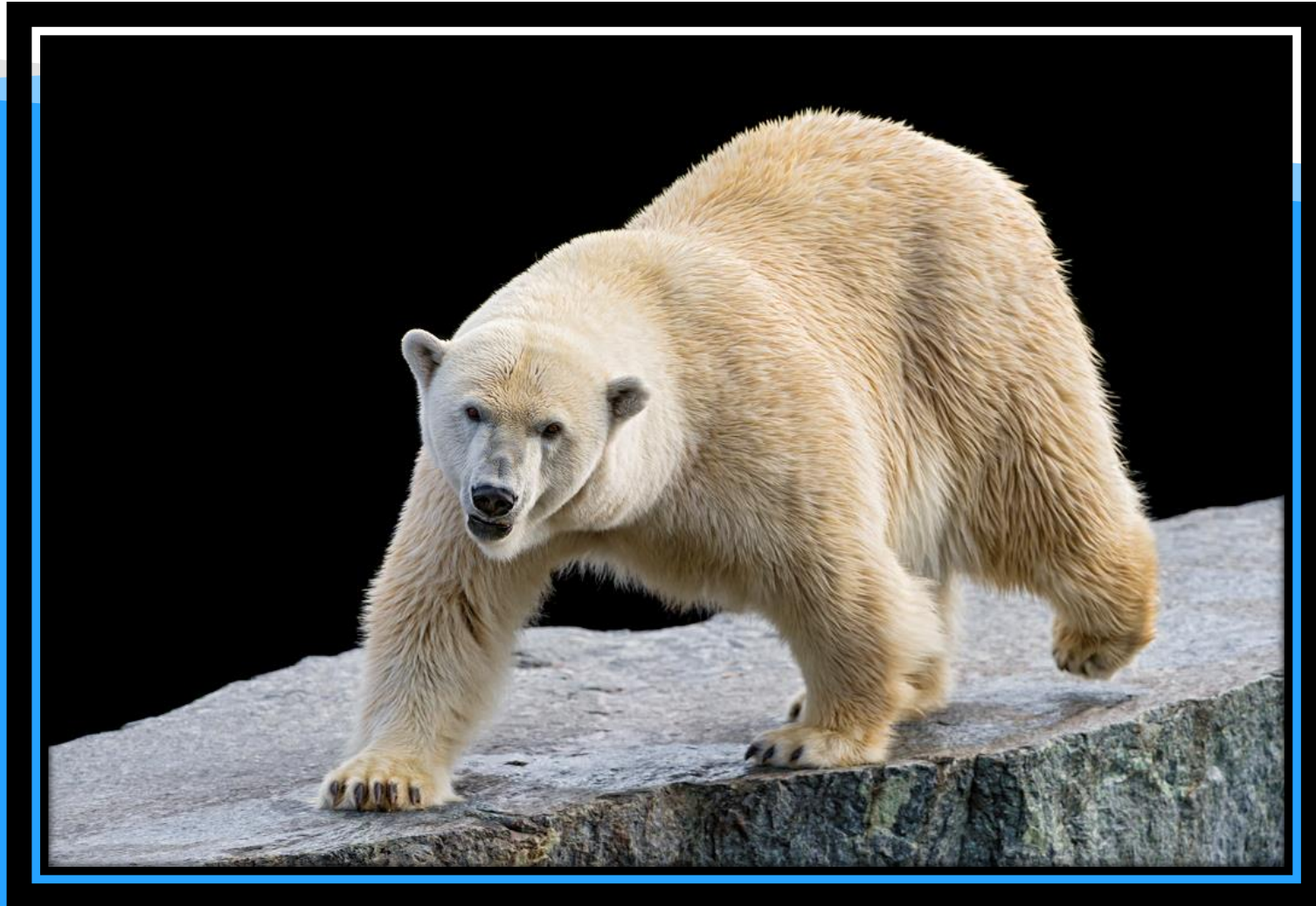
Empathic Listening

- Non judgmental
- Uses restatements to clarify “What I hear you saying is...”
- Give your undivided attention
- Listen for underlying messages
- Allow silence. This allows the person time to reflect on what they have said.



Case studies

- 1. 15 year old with TBI bites, non-verbal, refuses oral care
- 2. 65 year old with TBI that hoards, paranoid, anger that escalates quickly



15 year-old, non-compliant, non-oral and non-verbal



65 year-old with TBI, hoarding, paranoia, low frustration tolerance

John's Room Checklist

- Floor cleaned-no boxes or shoes in walk area.
- Urinal emptied.
- No more than 2 glasses from cafeteria or paper cups in room.

- No butter or food drawer.
- No towels on floor.
- Dirty clothes put in hamper.

Signature _____

Staff Signature _____

Date _____

General Behavioral Guidelines



- Always state desired behavior in the positive
- Use a calm voice with neutral facial expression, watch your body language
- Remember the Q-tip principle: Quit taking it personally!
- When an escalation occurs, have ONE person be the main communicator with the patient. Avoid having multiple people talking to the patient at once.
- Don't engage in arguments or power plays.
- Know your patient, have access to things they enjoy to use as a positive reinforcer: music, pictures, a favorite TV show or activity

General Behavioral Guidelines Cont'd

- Never correct a patient in front of others. DO praise them in front of other team members
- Restless patients need to be able to walk out their frustration in a safe environment that is not overstimulating.
- Allow the patient choices (limited equal choices) to involve them in decision making . It gives them some feeling of self control over what is happening to them.
- Use a neutral stance when interacting with someone who is known to be physically aggressive.

Resources

- Model Systems Knowledge Translation Center: <https://msktc.org/TB>
- Brain Injury-Behavior Management for Lifelong Success and Happiness. Ari Reindeau MS, BCBA, CBIS: https://www.youtube.com/watch?v=3Aa5W_RLmDU
- Crisis Prevention Institute: <https://www.crisisprevention.com/blog/general/how-to-set-limits/>
- Crisis Prevention Institute: <https://www.crisisprevention.com/blog/general/7-tips-for-empathic-listening/>
- Center for Outcome Measurement in Brain Injury (COMBI)
 - Overt Behavior Scale, Agitated Behavior Scale
- [Essential Brain Injury Guide \(EBIG 5\)](#), Academy of Certified Brain Injury Specialists, BIAA.

Agitated Behavior Scale

AGITATED BEHAVIOR SCALE

Patient _____ Period of Observation:
a.m.
Observ. Environ. _____ From: _____ / _____ / _____
a.m.
Rater/Disc. _____ To: _____ p.m. _____ / _____ / _____

At the end of the observation period indicate whether the behavior described in each item was present and, if so, to what degree: slight, moderate or extreme. Use the following numerical values and criteria for your ratings.

- 1 = **absent**: the behavior is not present.
- 2 = **present to a slight degree**: the behavior is present but does not prevent the conduct of other, contextually appropriate behavior. (The individual may redirect spontaneously, or the continuation of the agitated behavior does not disrupt appropriate behavior.)
- 3 = **present to a moderate degree**: the individual needs to be redirected from an agitated to an appropriate behavior, but benefits from such cueing.
- 4 = **present to an extreme degree**: the individual is not able to engage in appropriate behavior due to the interference of the agitated behavior, even when external cueing or redirection is provided.

DO NOT LEAVE BLANKS.

- _____ 1. Short attention span, easy distractibility, inability to concentrate.
- _____ 2. Impulsive, impatient, low tolerance for pain or frustration.
- _____ 3. Uncooperative, resistant to care, demanding.
- _____ 4. Violent and or threatening violence toward people or property.
- _____ 5. Explosive and/or unpredictable anger.
- _____ 6. Rocking, rubbing, moaning or other self-stimulating behavior.
- _____ 7. Pulling at tubes, restraints, etc.
- _____ 8. Wandering from treatment areas.
- _____ 9. Restlessness, pacing, excessive movement.
- _____ 10. Repetitive behaviors, motor and/or verbal.
- _____ 11. Rapid, loud or excessive talking.
- _____ 12. Sudden changes of mood.
- _____ 13. Easily initiated or excessive crying and/or laughter.
- _____ 14. Self-abusiveness, physical and/or verbal.