CARRYOVER IN VOICE THERAPY

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WHAT IS "CARRYOVER?"

• The ability to take the skills learned in a treatment session and apply them across settings, activities, and communication partners.

...Carefully <u>planned</u> carryover tasks lead to the generalization of skills outside the therapy room.

CONSIDERATIONS FOR FACILITATING GENERALIZATION:

- Patient awareness, self-monitoring skills, and ability to self-correct must be <u>trained</u>
- Design "real world" tasks
- Client's learning style and preferences (bottom-up vs. gestalt learner, visual, kinesthetic, etc.)
- Facilitate long-term learning by applying principles of neuroplasticity and motor learning

APPROACHES TO SKILL LEARNING:

"Top-down," gestalt

Example: Conversation Training Therapy (CTT)

- Briefly introduce "clear speech" concept
- Immediately apply at the conversation level

"Bottom-up," hierarchical approach

HIERARCHICAL APPROACH: Resonant Voice Therapy

- Introduce the concept: Use a hum or chant nasal-loaded CV syllables to establish "forward-focused" resonance
- Nasal-loaded words and phrases
- Patient-generated personal phrases
- Automatic speech tasks or cloze phrases
- Reading sentences or passages



- Describing tasks
- Simple questions
- Increasingly complex conversation or emotionally engaging content
- Changing the environment, adding conversational partners, distractors etc.
- Simulating occupational demands: Presentations, leading a meeting, lecturing on a topic, etc.

*This shouldn't take weeks upon weeks! For most patients, you can get to functional speech tasks in the *first* session. At least give them a "preview" of what you're working toward...

PRINCIPLES OF NEUROPLASTICITY (KLEIM & JONES, 2008):

- Use it or lose it
- Use it and improve it
- Repetition matters
- Intensity matters
- Specificity
- Salience matters

PRINCIPLES OF MOTOR LEARNING (MAAS ET AL, 2008):

Practice conditions

- Practice distribution: Massed vs. distributed
- Practice variability: Constant vs. <u>variable</u>
- Practice schedule: Blocked vs. <u>random</u> (AAA BBB CCC vs. ACB BCA CAB)

Feedback conditions

- Feedback type: Knowledge of performance vs. knowledge of results
- Feedback frequency: High vs. <u>low</u>
- Feedback timing: Immediate vs. <u>delayed</u>

THANK YOU!

CITATIONS & RESOURCES

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