Supported Communication Intervention
A Functional: Social Approach to Aphasia Rehabilitation

Margaret Rogers and Nancy Alarcon – adapted by Lesley Olswang

Example (J and L)

• Assess/Evaluate
  – Individual with Aphasia – Female 72 yrs old
  – 7 years post CVA (Nonfluent aphasia and apraxia of speech)
  – Western Aphasia Battery Aphasia quotient of 36.6/100 (characteristic of Broca’s)
  – Limited production – Apraxia of Speech
  – Shortened Version of Token Test = 4/36 (WNL cutoff is 29/36 so her ability to process auditory-only information as the information increased in length and linguistic complexity was severely depressed),
  – Gesture skills -very strong in receptive and expressive domains, physically
  – Uses vocalizations and intonation quite expressively
  – Married – husband retired
  – Avid cook, independent (drives)
• External evidence
  – What do we know about treatment of individuals with chronic aphasia?
    • Systematic review
  – *Speech and Language Therapy for Aphasia Following Stroke*
    • 12 studies, Level 2a,b
    • Inconclusive results

• *Conversational Partner Training Programmes in Aphasia: A Review of Key Themes and Participants' Roles*
  – 9 studies; Level 2
  – Variety of partners – spouse to volunteer
  – Benefits noted, although more research needed
• Behavioral Observation (for assessment/evaluation and planning treatment – including baseline measure)
  – Manner – conversation on topic of couple’s choosing
  – People – IA with her husband
  – Setting – clinic room
  – Client awareness – very aware – videotaped

• Qualitative analysis – what do you observe
  – Field notes (objective & subjective)
  – Patterns/themes
  – Conclusions
  I would argue that the qualitative analysis would be appropriate for determining recommendations.
Selecting a target objective

- External Evidence
- Interview
- Dynamic Assessment
- Behavioral Observation (can use the same one but analyze differently)

- External evidence
  - Specific research for supported communication
    - Level 2b
    - Trained volunteers had greater change than untrained volunteers. The training also produced a positive change in ratings of social and message exchange skills of individuals with aphasia
• Interview
  – Purpose
  – Kinds of questions you might ask?

• Dynamic Assessment
  – Does it have value here?
  – If so, what might it look like?
• Behavioral Observation (same as used for assessment/evaluation)
• Quantitative (more important for planning treatment – baseline)
  – What is concern?
  – What to count?
    • Frequency of occurrence
      – Simple enumeration
      – Response rate (%)

Supportive
• Uses multi-modality communication acts – writes, AAC
• Uses good prosody and nonverbal body language
• Facilitates message comprehension checks to determine if message understood, repeats as necessary, waits
• Comments – asks open-ended questions, makes on-topic remarks, uses short sentences, comments on partners attempts
• Initiating and maintaining topics changes & introduces topics appropriately
• Good listening and attending, acknowledges, waits
• Provides cues for multi modality communication and comprehension
• Requests for clarification are appropriate, specific, logical – guesses appropriately
• Provides opportunities to participate in social interactions; solicits input

Non-Supportive
• Primarily verbal
• Inappropriate rate, tone, poor eye contact, disengages
• Assumes comprehension, interrupts, talks for long periods
• Asks off-topic questions, remarks off-topic, includes too much detail, overly complex
• Changes topics abruptly without introduction, poor topic transition.
• Fails to listen attentively, makes discouraging remarks, fails to acknowledge
• Fails to give cues, doesn’t encourage better communication
• Inappropriate requests (e.g., articulation), uses nonspecific requests (e.g., huh, what)
• Fails to solicit input, does not seek opinion, does not offer choices.
• Quantitative – Another approach
• Scale (handout)
  – Counting frequency of occurrence can be challenging
  – Rating Scale – combining subjective and objective information

Baseline

• Quantitative
  – Behavioral Observation – Counting supportive strategy use
  – Rating Scale
  – How do you quantify?
SCI Principles – Theoretical Construct for Planning Treatment

- Teaching the individual with aphasia and his/her communication partners how to use multiple modalities of communication
- Training communication partners to support both expressive and receptive communication for the individual with aphasia
- Promoting opportunities for social interaction

General Treatment Goals

- To increase the quality of communication in the dyad
- To increase the use of supportive communication behaviors/strategies by the communication partner
- To decrease the use of non-supportive communication behaviors/strategies by the communication partner
Behavioral Objective – an example

For the partner of the individual with aphasia:
To increase the production of 9 supportive behaviors/strategies by 50% over baseline level of performance during two, 10-minute conversations in the clinic on a topic provided by the clinician and a topic of the couple’s choice. To get credit for producing a supportive strategy, one example must be used.

Event recording – simple enumeration

• Rating Scale
  – Could write a behavioral objective for this
    • What would that look like?
  – Could use as a measure of generalization

• Other thoughts about a possible behavioral objective?
Behavioral Objective

• The behavioral objective is an example of what you might wish to accomplish for the term.
• The objective requires counting occurrences of supportive behaviors that are produced by the partner.
• This is only one example of a behavioral objective that could be written for the specified general goals.

Treatment Foundations – Person with Aphasia

Prior to beginning treatment with the partner of the individual with aphasia, the clinician would first establish essential communication behaviors with the individual with aphasia

• This does not imply mastery – that is, independent and generalized skills, but rather
• Sufficient skills to communicate, including,
  – Knowledge and basic use of multi-modality communication behaviors that are relevant and appropriate for the individual and that will support meaningful interaction
Treatment – 3 Basic Stages

The 3 basic stages that follow provide a general view of how Supportive Communication Intervention would be conceptualized.

Note: these are general stages and do not reflect short term objectives nor a sequential teaching program. Rather, they guide the clinician in what elements should be a part of the intervention.

Stage 1: Educating the Communication Partner

• To understand nature and severity of the disorder, including modalities affected
• To recognize his/her partner’s communication challenges AND strengths
• To recognize his/her own communication style, including supportive and non-supportive strategies
Stage 2: Begin Building Successful Communication

- Establish personalized and dynamic tools, developed by clinician and partners, for the individual with aphasia and partners (communication notebook with appropriate content, paper and pencil, etc.)
- Demonstrate supportive communication, including:
  - Variety of strategies
  - Identifying the intent of interaction and how that changes in different environments

Stage 3: Teaching Specific Strategies to Enhance Communication Exchanges

- Provide partners with direct models and hands-on experience, including visual materials where appropriate, specific to:
  - Each supportive vs. non-supportive strategy
  - How to & When to support communication
  - How to act rather than react
- Practice specific supportive strategies with the clinician and then with the individual with aphasia
- Have partners practice specific supportive strategies with the individual with aphasia at home
  - In-session review of communication at home
Intervention Implementation – an example

- Stages 1 and 2 – could be provided as instruction, using discussion, questions and answers with partner to judge whether the partner understands information/demonstrations and is ready to move to Stage 3.
- Stage 3 would then be implemented through a sequential teaching program. Rather than teach all supportive strategies at once, divide them. The next three slides illustrate how a sequential teaching program might look for teaching 3 strategies at a time. This program would then be repeated twice, each focused on 3 different strategies. This is just one example of how these strategies might be taught.

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<tr>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
<th>Reinf. Sch. Criteria</th>
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<tbody>
<tr>
<td>1. Introduce &amp; define each of 3 supportive strategies (contrast with non-supportive strategy). Demonstrate/model (use visual materials as necessary) each. Ask partner to perform 3 items for each strategy with clinician during a “set-up” conversation where the clinician plays the role of the individual with aphasia.</td>
<td>Partner accurately demonstrates strategy. (e.g., waiting versus guessing; asking open ended question versus yes/no question; uses writing versus only verbal)</td>
<td>+ Social – appropriately communicate, comment on what was done well, contrast with non-supportive strategy -Corrective feedback, give suggestions for improvement – point out how and when to use strategies, when to act rather than react</td>
<td>1:1 Criteria for success on this step is correct use of 3/3 attempts to use each strategy</td>
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<tr>
<td>2. Ask partner to demonstrate 3 examples of each of the 3 supportive strategies with the clinician with no assistance in 3 minute “set-up” conversations. (Repeat 5 times)</td>
<td>Same as above</td>
<td>Same as above</td>
<td>Intermittent Criteria for success on this step is correct use of 3 strategies in 2 out of 3 attempts in each conversation</td>
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### Sequential Teaching Program continued

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<td>3. Have partner use 3 supportive strategies at least 3 times with person with aphasia during a 3 minute conversation selected by the partner (Repeat 3 minute conversation 5 times)</td>
<td>Same as above</td>
<td>+ Person with aphasia communicates, clinician provides positive comments periodically - Clinician provides corrective feedback as appropriate</td>
<td>Intermittent Criteria for success on this step is correct use of 3 strategies in 2 out of 3 attempts in each conversation</td>
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<td>4. Repeat Step 3, video tape and have partner evaluate performance. (No clinician feedback until videotape reviewed)</td>
<td>Partner accurately appraises strategy use.</td>
<td>+ Social – clinician comments on what was done well, contrast with non-supportive strategy - Corrective feedback, give suggestions for improvement</td>
<td>1:1 Criteria for success – go through this step twice, repeat if client seems confused or requests</td>
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- Repeat above steps until all strategies have been taught.
- Have couple practice at home as they are moving through the sequential teaching program and report back regarding satisfaction
Treatment Data

• Create a data sheet for treatment data to be used with the sequential teaching program

Remember

• This is just one way to teach the supportive strategies given the principles of SCI.