Is Progress in the Eyes of the Beholder? Perceptions of Untrained Undergraduate Students vs. Involved Graduate Clinicians and Professionals

University speech clinics frequently serve clients with chronic aphasia. It is often assumed that these services primarily help clients *maintain* skills while potentially training a graduate students who hope to work with adult clients. However, the university clinic setting also provides an opportunity to serve clients with profound deficits who have exhausted other healthcare options during traditional treatment intervals. Often, it is those clients with the most extensive neurological problems that surprise us with their growth and emerging potential well past any timelines for significant verbal recovery.

The ingredients (and associated goals) for ongoing success in treatment are unique to each individual and his/her significant others and life situation. While the efficacy of aphasia treatment has been clearly established, there remain many questions about documentation of change over extended periods of time. What should clinicians be monitoring as clients evolve from severe receptive and expressive aphasia in its various manifestations?

In 2010, Shadden et al. addressed this topic in an overview of client MM who initially experienced a massive left hemisphere stroke damaging all primary language centers in the brain. The ASHA poster session charted the client's recovery from 12 to 27 months post CVA from the perspective of evolving goals, outcomes and treatment strategies as the client's deficit became more readily identifiable and areas of competence emerged. The poster concluded with a list of observed critical communicative changes:

- Reduced delay between question/comment and response in conversations
- Increased frequency/variety of facial expressions
- Increased intonational variety
- Reduced monotone
- Marked increase in sense of humor, teasing, etc.
- Increased use and specificity of gestures
- Enhanced flexibility in using multiple communication tools
- Ability to follow group conversations
- Ability to attend for lengthy time intervals
- Increased use of verbal and nonverbal conversational placeholders (uhhuh, mmm, head nods)
- Initiation of communication and persistence in getting message across with topics of personal interest

All of these changes contributed to overall client and significant other success in living with aphasia in the context of the A-FROM model (Kagan, et al., 2007).

During the most recent semester, a number of students observed MM's therapy. It became apparent that they did not recognize the significance of many behaviors the clinicians were documenting as criteria for improved functional communication. As a follow-up, the first author presented a series of videos of MM to a senior level class. The communicative changes that seemed obvious and significant to the author were not as apparent to students, who focused primarily on linguistic deficits. These anecdotal experiences raised questions about what others

identify as important in the communication of someone with chronic aphasia and, more specifically, how SLP students see and interpret communication in the treatment context.

The current study built on the above-described 2010 case study data and raised the following research questions. When shown segments of treatment video and told improvement in treatment has occurred over time,

1) can UG students recognize a progression in treatment segments when the target communicative act (labeling, engaging in conversation) remains essentially the same across treatment segments?
2) what behaviors do students report using in attempting to place treatment segments in sequence?
3) to what extent do the behaviors used by students in identifying progress parallel the behaviors/outcome criteria used by clinicians?

Methods

Please note that all materials have been developed and IRB approval has been obtained. The actual study could not be completed until this spring semester (beginning 1-18-11) because the target group of subjects is in a class that meets during this semester.

Subjects: Subjects are 50 undergraduate (junior level) students in an Introduction to Clinical Practice class at the University of Arkansas. Students have had no prior exposure to aphasia other than a small content unit in a basic Introduction to Communication Disorders class. Completion of the study is required as part of the Clinical Practice class because the instructor will be using this for clinical observation hours and for training in observation skills.

Videos: Two sets of four video segments each have been created. Each set contains video from one representative treatment session in each of the following semesters: Fall 2009, Spring 2010, Summer 2010, and Fall 2010. Set 1 contains 3 to 5 minutes of therapy activities requiring word retrieval or some alternate form of labeling with picture stimuli from each session. Set 2 contains 3 to 5 minutes of conversation from each treatment session. Order of video segments within each set has been randomized, and two versions of the video materials were created with different random orders.

Procedures: The study will be completed during one class period. A brief explanation of the concept of goal-setting and outcome criteria will be provided (consistent with course information). Students will be informed:

> *When someone has severe aphasia, change may occur very gradually and may extend more than a year post stroke. At this point, it is important for therapy to make a difference in a person's functional everyday communication. One question is…do the changes measured by outcome criteria make a difference to an outsider who is unfamiliar with the person with aphasia, the specific nature of his deficits, and the treatment goals and desired outcomes? This is where you come in.*
>
> *You will be viewing two sets video segments from 6 treatment sessions with client MM. One set will show the client engaged in tasks that require some form of naming or labeling pictures. The other set involves conversational interactions between client and*

student clinician and/or supervisor. We have documented continuing improvement for this client over a period of at least 15 months, and the client and his wife confirm this improvement in daily communication.

You have two tasks for each set of videos:

1) *You must place the videos in sequence, based on your perception of improvement or change over time. You may use any criteria you wish to make this decision.*
2) *You must write an explanation for the sequence you chose. In other words, you must explain what behaviors led you to place some segments earlier or later than others. We want to know what you focused on in deciding the sequence of events. Be as specific as possible, and feel free to list as many observations as you wish.*

Results

Data analysis will consist of the following:

- Sequencing of treatment segments
    - % of subjects placing each set in correct sequence
    - Comparison of sequencing for labeling/word retrieval and conversation
    - Analysis of "errors" in sequencing made
- Behavioral basis for sequencing
    - Summary reporting of most common behavioral bases for sequencing and sorting into verbal and nonverbal
    - Comparison of behavioral bases for conversational and labeling/word retrieval segments
    - Comparison of behavioral bases with outcome criteria used in therapy and behavioral changes reported in Shadden, et al (2010)

Discussion and Implications

The data from this study are valuable for a number of reasons. They provide insights related to:

- the perceptions of "outsiders" (external observers) re communication in severe aphasia (and recovery in general) and thus provide guidance with respect to areas that need to be targeted in public education
- the perspectives of UG communication disorders students re functional communication for person with aphasia, with implications for academic education and clinical training
- perceptions of communicative success "from the outside looking in"
- "outsider" awareness of the critical role of communication about topics of personal relevance and importance (e.g., during conversation segments)