Training an Aphasic Clinician: A Case Study

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In the past, clinical aphasiologists have been assisted by supportive personnel in a variety of ways. These experiments have produced mixed results. Recently, as part of a Veterans Administration manpower grant at Memphis State University, we have attempted a systematic investigation of the potential for employing a mild aphasic to assist in the formal language treatment of adult aphasics. This investigation was the first step within a broader objective to develop new employment opportunities for veterans handicapped by brain injury and for non-handicapped veterans. Rather than review the serious issues regarding supportive personnel, as was done at this conference last year, (Davis and Daniel, 1976) today I will describe and demonstrate with videotape the training of a mild aphasic to conduct structured treatment tasks.

Though we are interested in developing a model training program for supportive personnel in clinical aphasiology, such a training program cannot exist unless jobs are available. We feel that jobs will not be developed unless it is demonstrated that the use of supportive personnel in this area is feasible, practical, or more basically, worth the money. To obtain an initial opinion on this subject, we sent a questionnaire to 97 VA Speech Pathology Services. A summary of 51 responses to the 14 statements appear in Appendices A and B. The statements were dealt with on a 5-point scale with 5 as "strongly agree", 3 as "undecided", and 1 as "strongly disagree". We discovered a wide range of opinions, from complete repudiation to enthusiastic acceptance, including one precedent in hiring a nonprofessional to work with aphasic patients. The most skepticism was found for supportive personnel engaged in counseling and for hiring a mild aphasic to conduct treatment tasks. Today, you will see a mild aphasic conducting treatment tasks.

Trainee History

Our communication aide or training aide, as we call him, was a tax lawyer who suffered a left CVA in May, 1972, when he was 56 years old. An outline of his history appears in Table 1. He had received two years of language treatment before beginning our program as an aide almost one year ago. At that time, he scored at the 91st percentile overall on the PICA with hesitant speech, some word finding problems, and reading limitations as revealed in other tests.

Training Methods

The aide's training was carried out within the context of a comprehensive service and graduate student training program in clinical aphasiology, also within the domain of the VA manpower grant. In this program, eight students are assigned to eight aphasic patients, who participate in a varied treatment protocol three hours per day, four days per week. Our aide's training was conducted by myself as Clinical Supervisor, a doctoral student assigned to

the program, and with assistance from the Masters level graduate students working directly with our patients.

Training the aide consisted of roughly three stages, the first stage involved developing familiarity with a variety of aphasic disorders and treatment procedures. This was done mostly through observation. The second stage involved formal training in conducting structured treatment tasks. This was done first, in a role playing situation with staff, and then, in individual treatment with a variety of aphasic patients. The third stage, completed only last week, involved a one month job performance evaluation at the Memphis VA Hospital Speech Pathology Service.

Table 1. History of first training aide

Onset: CVA, 5/21/72
Treatment: 6/13/72 - 8/10/72; 9/73 - 4/75
Training aide: 5/76 - present

PICA percentile scores:

	Pre-Treatment	Treatment		Training Aide	
	1/73	12/73	4/75	5/76	4/77
Overall	88	86	97	91	93
Gestural	91	95	96	90	94
Verbal	64	79	93	78	90
Graphic	92	84	98	93	94

Start of training as an aide

PICA scores: see above

Boston Exam Summary
Auditory Comprehension: 94% (Z = + 1)
Oral Expression: 100%
Except (a) verbal agility 71% (Z = + .5)
(b) animal naming 30% (Z = 0)

Reading: 100% (Z = + 1)
Writing: 100% (Z = + 1.5)

Token Test: 47/62 76%

Raven's CPM: 28/36 75%ile

PPVT: 114 raw score 64%ile (ages 17-6 to 18-5)

Peabody Individual Achievement Test

Reading recognition:	79 raw score	78%ile
Reading comprehension:	66 raw score	46%ile
Spelling:	70 raw score	54%ile
Mathematics:	61 raw score	41%ile

Today I will focus on the second stage of training. We wanted to see how well our aide could conduct traditional structured treatment tasks within his receptive and expressive capabilities. By borrowing from Brookshire's (1976) classification of the treatment process, we isolated single aspects of the process to vary each time we increased the difficulty of each task. As a result, we had a unique method for placing the treatment process itself under close scrunity. Just as aphasic disorders may provide clues as to the nature of normal language processes, an aphasic clinician's difficulties might magnify certain subtle requirements of the normal treatment process. The handout (Appendix C) shows several treatment tasks that our aide was able to conduct as a clinician. These tasks are classified according to predominant language skills required of the clinician. Therefore, receptive tasks are tasks requiring predominantly receptive language ability of the clinician but are primarily expressive tasks for the patient. We varied levels of task instruction, clinician request, patient response, clinician response to the patient, and scoring method for each task.

Before our aide carried out any of these tasks with an aphasic patient, he attempted the tasks with a staff member or student role-playing as patient. Reliability of the aide's response scoring was examined by comparing a pre-determined set of responses by the acting patient with the scores recorded by the aide on LaPointe's Base 10 Forms. When the aide was shown to be able to conduct a task and his scores were at least 94% appropriate, he attempted the task with the appropriate patient. We were especially interested in his flexibility in dealing with the varied and sometimes unexpected nature of aphasic responses. We were also interested in whether he would improve on a second attempt with the same task after receiving feedback with videotape of his first attempts with a patient.

Results

Though we want to minimize generalizing from a single subject, our first handicapped aide has directed us to very real problem areas for future study and to possible readjustments in defining the aide's role.

However, the training aide did demonstrate some capabilities that still must be assessed as to their value when considering establishment of paid positions. First, the aide's particular personal experience with aphasia and the treatment process enabled him to develop a rapport and understanding of our patient's difficulties and concerns. Most important, though, was the aide's willingness and ability to communicate with other patients in this regard. This ability, as well as the apparent responsible position of the aide, offered encouragement to other patients and their families. Second, the aide was able to carry out a variety of structured treatment activities using at least 5-point scoring scales reliably. Therefore, in some clinical circumstances, he could provide supplemental treatment for a number of patients.

Nevertheless, this additional quantity of treatment possesses limitations of quality given the particular aide that we examined. The principal area of difficulty observed at Memphis State and at the VA Hospital was rigidity on a number of levels. One area was revealed in conducting specific treatment tasks. A limited understanding of the nature of different aphasic disorders made it difficult for him to understand why treatment methods varied among patients. He had difficulty adjusting task instructions when patients failed to initiate a task appropriately. He had difficulty adapting to different scoring systems that were tailored for each patient by a professional. He had a general

difficulty responding appropriately to unexpected or new behaviors.

This aide's language difficulties limited the level of task he was able to direct reliably. Detection of subtle errors in a patient's speech was limited either by the aide's subtle comprehension deficit or by his minimal understanding of language behavior. His expressive deficit had resulted in his sometimes giving inaccurate or confusing task instructions. This problem was minimized by giving the aide specific instruction to read aloud, but his rigidity made it difficult for him to vary these instructions when the need arose. Four segments of the aide's training were illustrated with videotape. Brief describtions of each segment follow:

(1) Conversation with an aphasic patient.
This was an example of our training aide engaged in a conversation with one of our aphasic patients. This seemed to exemplify his willingness and ability to communicate with other aphasic individuals regarding their concerns and difficulties.

(2) Receptive-Expressive Task.
This was an example of task #12 on the Task Example Sheet done with a Broca's patient. He had a little trouble with this task when he began without giving instructions to the patient, discovered he had forgotten instructions, and gave instructions after the first task trial.

(3) Expressive Task.
This was Task #4 on the Task Example Sheet. Again we saw a brief mix-up in instruction, but basically the task was done well.

(4) Perseveration.
This was an example of a repetition task in which the patient had a perseveration problem. This exemplified the aide's difficulty in responding appropriately to unexpected behaviors.

Implications

We had suggested before that a communication aide might enable the professional to use his time better or to provide supplemental treatment by having the aide perform seemingly trivial structured treatment tasks (Davis and Daniel, 1976). However, as all of us here realize, the triviality of simple tasks with aphasics is more apparent than real. The VA Hospital staff suggested that this type of aide has taken more of their time than is justifiable, especially regarding his adjustment to new ways of doing things that he was trained to do. Perhaps we should readjust our view of the aide's role to such time saving activities as material filing and preparation, monitoring programmed lab work and room preparation (Keith, 1977). Perhaps, we have not fully tapped the value of empathy injected into the group treatment setting.

We shall continue to pursue the many questions that remain unanswered:

(1) Would a different trainee suggest different conclusions?
(2) Would more and better training minimize some of the problems cited here?
(3) Would an aide's capabilities be of enough value to warrant establishing technician positions, as has been done in several other professions?
(4) How much distortion of the treatment process is tolerable in relation to the potential benefits from such supplemental treatment?

Just as we have been unwilling to embrace or reject the communication aide concept based on minimal empirical evidence, we are unwilling to close the case based on a sample of one.

References

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Discussion

Q. Was what we saw on video typical of the man's work?
A. Yes, especially the point of his difficult area, giving instructions, varying from task to task, patient to patient. This was pretty typical.

Q. What did he eventually do to get the patient to stop perseverating?
A. He didn't. After the aide kept saying, "You eat in the kitchen, you eat in the kitchen" the patient finally said "You eat in the kitchen".

Q. Was he instructured in techniques to break through the perseveration?
A. No, we reviewed it with him after this particular episode, and it didn't come up again, so I don't know what he would have done.

Q. Did the trainee work with a variety of patients in terms of severity of the disorder?
A. Yes.

Q. Did he have greater success with certain severities than others?
A. Well, his task was so structured for him that he knew pretty well what to expect from each patient regardless of the severity. He didn't do any of the tasks that we hadn't already planned for him to do and, besides the difficulties that I cited, there were not too many more. It really didn't seem to make that much difference -- the naming task, the repetition task, or comprehension task -- he knew how to do them.

Q. What are the areas cited that the non-aphasic clinicians could learn from?
A. Specifically I think that we learned to pay a little more attention to cues offered by the patient. I think it made the students a little more

aware of what they were looking for. They were sitting back watching what was happening but neglecting cues from the patient.

Q. Was there feedback from the patients?
A. Yes. You might think that there would be some resentment of somebody else working with them besides a regular clinician, but they really got to know him personally in an informal social setting and he had a lot of contact with them before he went ahead and did the treatment task with them. They had already established a very good rapport with him and he was very well accepted. Comments from several of the patients were "Oh I wish I could do that". "I wish I could help somebody." "Where can I learn to help somebody?" Comment: The patients were still getting other types of treatment.

Q. What is his future role?
A. We do not have a position for him and he was never told that there would be a position for him. We just gave him an outline of what he would be doing through the year. He is in law practice and is a tax lawyer and worked one-half day in his law office; so this was strictly something that he was doing on his own time.

Q. Since you think counselling would be a good thing for him to do, what is the possibility of misinformation in his counselling?
A. We really have no control over what he ways to them; in the situations that we are talking about, it is just informal discussion and he was just chit-chatting with them and giving them the support and the understanding that they need because he has been in their shoes.

Q. Is rigidity characteristic of aphasics or non-professionals?
A. His subtle deficits caused some of the problems; being a lawyer had some influence. We don't know really what he was like before the stroke but we all have a pretty good hunch that he was pretty strict in the way he thought and the way he functioned.

Appendix A

VA EDUCATION AND TRAINING GRANT SURVEY

	N	Range	Mean	SD
OVERALL	51	5.00 - 1.57	3.65	.71
GENERAL	51	5.00 - 3.00	4.37	.52
SPECIFIC	51	5.00 - 1.00	3.44	.83

General	Mean
1. Our patients would benefit from more time in treatment than they can receive at present.	4.41
2. Certain aphasia treatment tasks can be conducted only by a trained professional.	4.75
3. Certain aphasia treatment tasks can be conducted by a trained communication aide (non-professional).	4.11

Specific	
1. If a position were available, I would hire a trained veteran to assist the professional speech pathologist.	3.47
2. A mild aphasic could conduct a limited variety of aphasia treatment tasks.	3.29
3. A mild aphasic could provide assistance in group treatment settings.	3.77
4. A mild aphasic could assist in patient and family counseling.	3.28
5. A non-brain injured veteran with paramedical service background could conduct a limited variety of aphasic treatment tasks.	3.72
6. The above non-brain injured veteran could assist in group treatment settings.	3.74
7. This veteran could assist in patient and family counseling.	3.15
8. I would be interested in seeing what a mild aphasic could do to treat our patients.	3.56
9. I would be interested in seeing what a non-brain injured veteran could do to treat our patients.	3.55
10. I would hire a brain injured, aphasic veteran who has been trained sufficiently.	3.14
11. I would hire a non-brain injured veteran who has been trained sufficiently.	3.43

Appendix B

Analyses of Survey Results

Table 1. Percentage of 51 responses according to response levels for all 14 statements, 3 general statements, and 11 specific statements

	Response Level	Overall	General	Specific
Strong agreement	4.50 - 5.00	13%	42%	12%
Agreement	4.00 - 4.49	21%	40%	10%
Mild agreement	3.50 - 3.99	31%	12%	25%
Undecided	3.00 - 3.49	17%	6%	31%
Undecided	2.50 - 2.99	13%		13%
Mild disagreement	2.00 - 2.49			6%
Disagreement	1.50 - 1.99	4%		
Strong disagreement	1.00 - 1.49			4%

Table 2. Average responses according to type of language assistant and type of treatment

	Mild Aphasic	Normal
Treatment tasks	3.29	3.72
Group treatment	3.77	3.74
Counseling	3.28	3.15

Appendix C

Examples of tasks attempted by the training aide (TA) in role-playing and patient contact. The categories represent aspects of the structured treatment process that were varied independently to examine the TA's abilities (modified from Brookshire, 1976).

Task (Instructions)	Clinician Request	Patient Response	Clinician Response	Scoring
RECEPTIVE SKILL ORIENTATION				
1. Conf. naming	Present or point to object	Spoken name of object	1) Reinforcement 2) Repeat request 3) Cues	a. +/- b. 1-5 scale
2. Word pair similarities	Present word pairs	Spoken description	"	"
3. Spatial relations	Present pictures ("Where is the . . . ?")	Spoken description with preposition	" "	a. +/- b. 1-4 scale
EXPRESSIVE SKILL ORIENTATION				
4. Word Comprehension	Spoken name or object	Point to picture	"	a. +/- b. 1-3 scale c. 1-4 scale d. 1-5 scale
5. Word memory span	Spoken sequence of names (read aloud)	Point to sequence of pictures	"	a. +/- b. 1-5 scale
6. Writing words to dictation	Spoken word	Written word	"	a. 1-5 scale
7. Spelling words	Spell word by each letter	Written word	"	"

Task (Instructions)	Clinician Request	Patient Response	Clinician Response	Scoring
8. Gesturing functions	"Show me what you do with (object or picture)"	Gestured response	"	"
9. Word recognition	Spoken word	Point to printed word	"	"
RECEPTIVE-EXPRESSIVE SKILL ORIENTATION				
10. Word repetition	Spoken word	Spoken word	"	"
11. Sentence repetition	Spoken sentence	Spoken sentence	"	a. +/- b. 1-5 scale c. 1-8 scale
12. Question answering	Sentence, then question about it	Spoken phrase or sentence	"	a. +/- b. 1-5 scale
13. Synonyms	Give me another word that means _____	"	"	"