

An Analysis of How Clinicians Respond  
to Unacceptable Patient Responses in Aphasia Treatment Sessions

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The Clinical Interaction Analysis System (CIAS) (Brookshire, 1978) was developed to describe interactions between clinicians and patients in aphasia treatment sessions. In a paper presented at last year's Clinical Aphasiology Conference, Brookshire outlined the results of a study in which the CIAS was used to look at the relationship between certain clinician behaviors and task characteristics and the occurrence of unacceptable patient responses (Brookshire and Nicholas, 1978). (The CIAS identifies patient responses as being unacceptable to the clinician rather than as errors because clinicians frequently are attempting to elicit target responses that are not the same as normally accurate or "correct" responses.) The results of this (1978) study indicated that certain clinician behaviors generated unacceptable patient responses more frequently than did others and that clinicians tended to respond to unacceptable patient responses in characteristic ways. Another finding of this study was that unacceptable patient responses tended to occur in clusters.

Following this study, we became interested in determining which clinician behaviors were most effective and which were least effective in "breaking up" this tendency for errors to generate errors. In order to investigate this question, we coded the contents of 75 thirty-minute videotaped samples of aphasia treatment, using the CIAS. The contents of these samples were then analyzed to determine (1) which clinician request behaviors were most effective in changing unacceptable patient responses (UR) to acceptable responses (AR), (2) whether clinician explanations were effective in changing unacceptable responses to acceptable responses, and (3) whether the acceptability of patient responses was influenced by various types of clinician feedback for preceding responses.

In order to investigate the first question, we identified all events in the 75 treatment samples which contained patient responses that were unacceptable to the clinician. Next, we looked at the request event which immediately followed each of these unacceptable response events and determined whether the patient's response to that request was acceptable or unacceptable to the clinician. We then calculated the proportions of these responses which were acceptable and unacceptable for each request type. These proportions are presented in Figure 1. The data in Figure 1 suggest that if an unacceptable response occurs, a clinician is more likely to obtain an acceptable response from the patient on the next request by asking a "yes-no question" (Question 1) or providing a "model" rather than by asking an "other than yes-no question" (Question 2) or providing a "completion." For example, if the original request which elicited an unacceptable response from the patient was "Tell me what day it is" (Imperative), the clinician would be more likely to obtain an acceptable response from the patient by asking "Is today Tuesday?" (Question 1) or by providing the word "Tuesday" (model) than by asking "What day follows Monday?" (Question 2) or by saying "The day after Monday is \_\_\_\_\_" (Completion).

A word of caution may be appropriate here. Remember that the results we are reporting here are general trends seen in a large sample of aphasia

treatment sessions. Individual patients may each display their own hierarchy of most facilitating request types and this hierarchy may vary depending upon the type and difficulty level of the task. The main point which these data illustrate is that all request types will not be equally effective in changing unacceptable responses to acceptable responses. Clinicians who consider this in structuring their treatment sessions may find that they are more effective in eliciting successful responses from their patients.

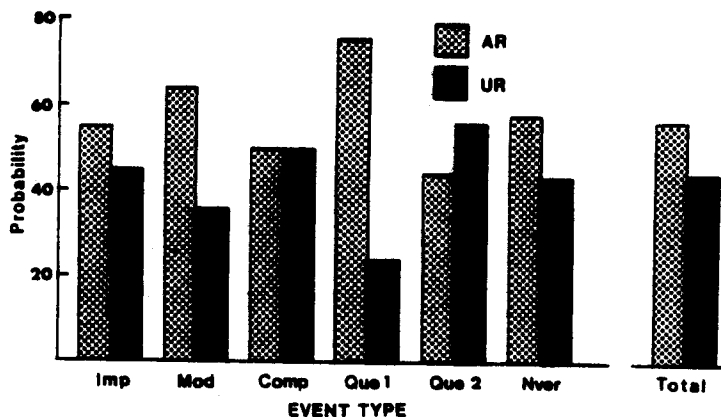


Figure 1. Proportion of acceptable and unacceptable patient responses to request events which followed unacceptable patient responses.

We wanted to obtain additional information about factors which might influence the acceptability of patient responses following unacceptable responses. Therefore, we selected, from all events which immediately followed each of these unacceptable response events, those events in which the clinician asked the patient to perform the same response that had been requested in the preceding (UR) event. These "same response" events were then divided into three groups; 1.) exact repetition of the preceding request, 2.) rewording of the previous request, but maintaining the same request type (e.g., imperative, model, completion), and 3.) presentation of a request type which was different from the request that elicited the preceding unacceptable response. Next, we determined whether the patient's response to each request in each of the three groups was acceptable or unacceptable. We then calculated the proportions for acceptable and unacceptable responses for each request type for each of the three groups. The proportions for "same response" events which were an exact repetition of the preceding request are presented in Figure 2. None of the request types in this group were particularly effective in eliciting an acceptable response following an unacceptable response. The request type which was most effective was "Imperative." It was our subjective impression that this higher acceptable response level was primarily attributable to repetition of imperative requests in auditory comprehension tasks, such as "Point to the red circle." This impression is supported by the results of a study by LaPointe, et al., (1978) presented at last year's Clinical Aphasiology Conference. The results of their study indicated that in an auditory comprehension task, "when a command was failed, repetition led to significantly improved performance."

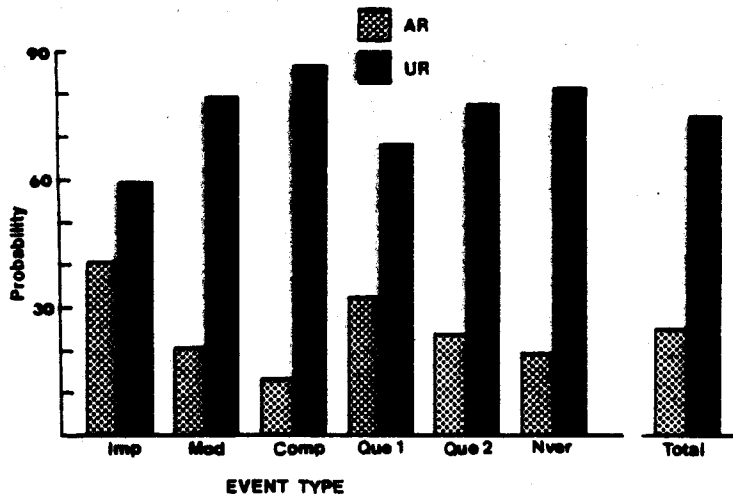


Figure 2. Proportions of acceptable and unacceptable patient responses to "same response" request events which followed unacceptable patient responses and were exact repetitions of the preceding (UR) request event.

The proportions for acceptable and unacceptable responses for "same response" events which were a rewording of the preceding request are presented in Figure 3. Again, none of the request types in this group were particularly effective in eliciting an acceptable response following an unacceptable response. Completions appeared to be the most promising request type for this group.

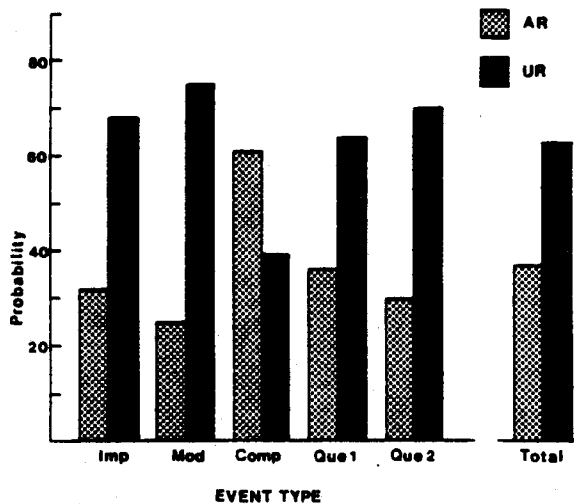


Figure 3. Proportions of acceptable and unacceptable patient responses to "same response" request events which followed unacceptable patient responses and were a rewording of the preceding (UR) request event.

Figure 4 presents the proportions for acceptable and unacceptable responses for "same response" events in which a different request followed the unacceptable response than preceded it. The request types in this group were no more effective at eliciting acceptable responses following

unacceptable responses than those in the other two groups. Models appeared to be the most effective request type in this group.

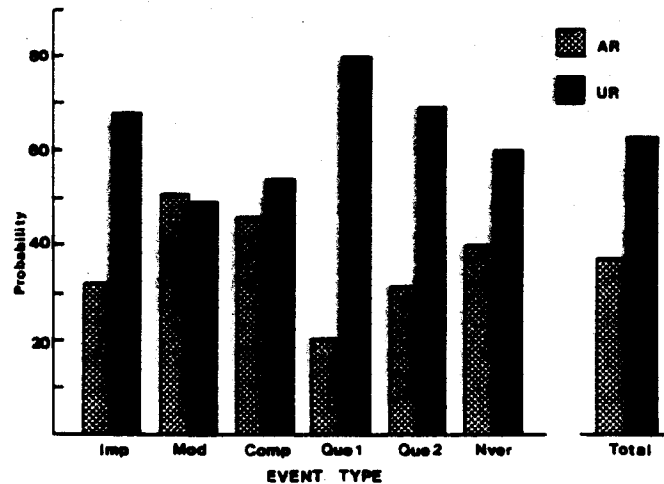


Figure 4. Proportions of acceptable and unacceptable patient responses to "same response" request events which followed unacceptable patient responses and were a different request type from the preceding (UR) request.

The overall proportions for acceptable and unacceptable responses for all three types of "same response" events and also for any request event following an unacceptable response are presented in Figure 5. The data in this figure suggest that, if an unacceptable response occurs and the clinician wishes to request the same response from the patient, it is better to reword the request or change to a new request type than to simply ask again for the same response in the same way. These data

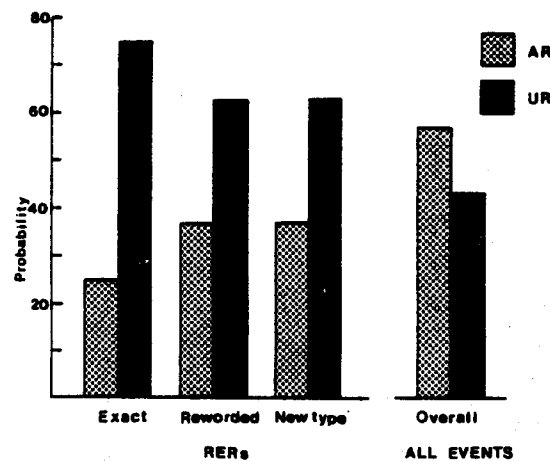


Figure 5. Overall proportions of acceptable and unacceptable patient responses to "same response" request events which followed unacceptable patient responses and to any request event which followed unacceptable patient responses.

further suggest that an even better strategy would be to change the response that is expected of the patient. The overall probability of obtaining an acceptable response following an unacceptable response by requesting the

same response from the patient is only .33 compared to .57 for any request following an unacceptable response.

In our observation of treatment, we noticed that clinicians frequently provided an explanation to the patient following an unacceptable response and then followed the explanation with a new request. Examples of such explanation would be "Don't say it. Just point to it," or "I'll say it again for you." In order to determine whether this strategy was effective in changing patients' responses from unacceptable to acceptable, we gathered a sample of 422 instances in which unacceptable responses were followed by clinician explanation and a subsequent request. We then determined whether the response to the request which followed each occurrence of explanation was acceptable or unacceptable. The proportion of acceptable responses following an unacceptable response plus an explanation was then compared with the proportion of acceptable responses following an unacceptable response without intervening explanation. The results of these calculations are presented in Figure 6. It can be seen from this figure that presenting explanation following unacceptable responses not only did not help the patient to produce an acceptable response to the next request, it actually interfered with the patient's subsequent performance.

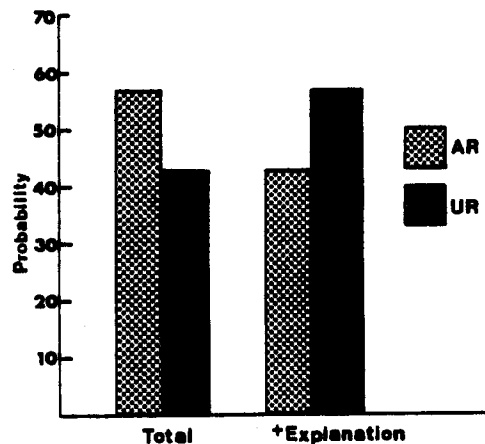


Figure 6. Proportions of acceptable and unacceptable patient responses to request events which followed unacceptable patient responses with and without intervening explanation.

We next set out to determine whether clinician feedback for preceding responses (acceptable and unacceptable) might have an effect upon the patient's subsequent response. First, we identified all instances of feedback (positive, negative, repetition, correction, elaboration) and no feedback and determined whether the response following each occurrence of feedback was acceptable or unacceptable. We then determined the proportions for acceptable and unacceptable responses following feedback and

following no feedback. The results of these computations are presented in Figures 7 and 8. The overall proportions for all request events are also presented in these figures.

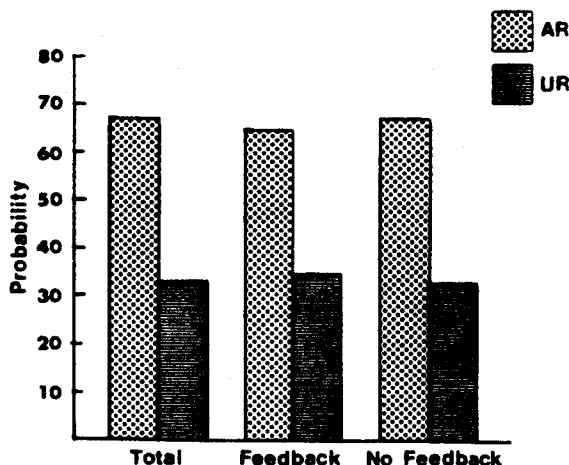


Figure 7. Proportions of acceptable and unacceptable patient responses to all request events, to request events which followed feedback, and to request events which followed no feedback.

It can be seen in Figure 7 that delivery of feedback had no observable effect upon the probability of acceptable patient responses to subsequent requests. Figure 8 demonstrates that none of the various types of feedback had any striking effect upon response acceptability.

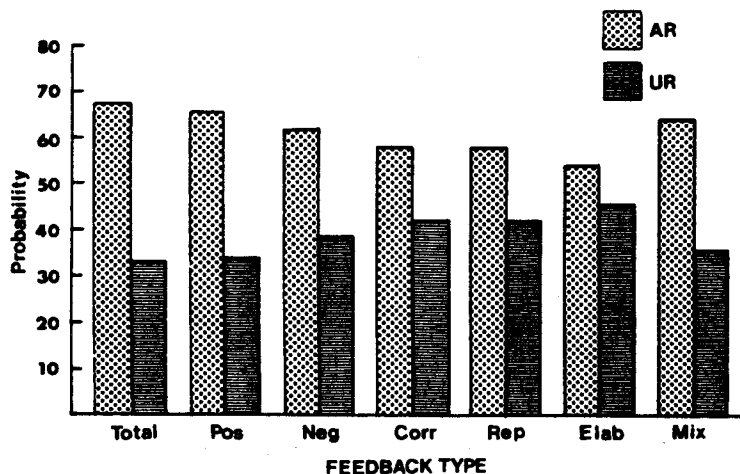


Figure 8. Proportions of acceptable and unacceptable patient responses to all request events and to request events which followed various types of feedback.

In summary, these data suggest that some clinical strategies appear to be more effective than others at "breaking up" the tendency for an unacceptable patient response to generate additional unacceptable responses. Requesting a different response from the patient following an unacceptable response rather than requesting the same response again (even in a

different form) appeared to be the best strategy for getting the patient "back on track." Explanations and feedback did not appear to be effective in changing unacceptable responses to acceptable responses.

Once again though, we must remember that these are general trends seen in a sample of aphasia treatment sessions. The behavior of individual patients may not always reflect these average trends. With these data we hope to illustrate some of the factors which could influence the patient's ability to successfully respond to clinician requests, particularly those which follow an unsuccessful response. Some patients may benefit greatly from hearing an exact repetition of the previous request while others may do better if the request is reworded or presented in a different request form. Some patients may benefit from an explanation which follows an unacceptable response, while explanation may just add "noise" to another patient's system. Some patients may be helped by contingent feedback while others may only need general supportiveness from the clinician.

Even though patients may respond somewhat idiosyncratically to some clinician behaviors, we found enough consistency in our treatment samples to suggest that the clinician can, in fact, influence the occurrence of unacceptable responses, and that one can often predict the direction of that influence. Continued exploration of these relationships, taking into account clinician, patient, and treatment task characteristics, can be expected to increase the accuracy with which we can predict the effects of clinician behaviors upon the acceptability of patient responses.

#### References

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#### Discussion

- Q: Do you have any feelings about whether some explanations were interpreted by patients as being threatening or nonsupportive?
- A: In some instances it certainly looked like that and in some instances it appeared as if the explanations were merely adding "noise" to the patient's system.
- Q: Did you look at the content of request events following unacceptable patient responses? Were some requests more complex syntactically than others?
- A: All of the analyses in this study were accomplished using the CIAS and there is no way to analyze the actual content of requests (i.e., syntactic complexity, difficulty of lexical items) using this system. An analysis of the content of the requests would make an interesting study.

Q: Do you think that type of aphasia would have any effect on which requests following unacceptable patient responses were most facilitating?

A: Yes, I'm sure that there would be differences in the hierarchy of most facilitating request types following unacceptable patient responses depending on the nature of the patient's disorder. Even patients with the same diagnosed disorder, however, might display different response patterns to various request types. The intent of this presentation was not to outline absolute hierarchies of most facilitating request types, but merely to stress the fact that, for each patient, some clinician behaviors are more likely to get the patient "back on track" following an unacceptable response than others. Some clinician behaviors which have traditionally been used to help patients produce successful responses may, in fact, not be helpful at all for certain patients. Possibly this presentation will encourage clinicians to take a closer look at the effectiveness of what they are doing to "break up" unsuccessful patient responses.

Q: I would just like to say that your findings seem to fit exactly with what we have tried to do with PACE therapy. When a patient fails when trying to convey a message, the clinician asks the patient if there isn't another way that they could try to get the message across. This seems to be the type of clinician response to unsuccessful patient attempts that works best. Other types of clinician behaviors seem to discourage successful interactions.

A: Yes, it often seems as if patients know what will best help them to produce successful responses, but that clinicians don't learn this from their patients.