

THE EFFICACY OF PRAGMATIC INTERVENTION WITH APHASIA

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The disorder of aphasia is usually defined as the loss of language abilities due to central nervous system (CNS) damage, Schow et al. 1978. The various assessment procedures available to determine the nature and degree of the language disability evaluate the areas of listening, speaking, reading, and writing. However, the principles that account for how the language "works", i.e., the pragmatics of language, Rees 1979, often are not evaluated and seldom are considered in the planning of traditional therapeutic intervention.

Pragmatics is defined by Bates 1976 as "...rules governing the use of language in context." In the disorder of aphasia, often specific language abilities - recognition, recall, and naming of pictured stimuli; comprehension of verbal and written information; verbal expression; and reading and writing are impaired. However, it appears that some aphasic individuals retain the ability to understand and to produce utterances which are appropriate to the context in which they are made. This ability is defined as communicative competence, Campbell and Wales 1970.

Specifically, it appears that some aphasic individuals retain the ability to reference, that is, to construct or encode appropriate messages which enable them to identify the intended meaning of the speaker. These individuals are sensitive to the communicative context (social and physical) and may be able to use feedback from the speaker to achieve understanding, Coelho and Duffy 1980.

The purpose of this study, then, was to investigate the efficacy of using pragmatic intervention in determining the communicative abilities retained and in increasing the communicative competence of the subject.

Methodology

In this case study, the subject was an 81 year old female who suffered a left hemisphere cerebrovascular accident (CVA) resulting in a right hemiplegia and aphasia. For 10 months, therapy was directed toward increasing the subject's ability to comprehend auditory stimuli, match words to pictures and name pictured stimuli (traditional aphasia therapy). Although the subject was able to make some gains in these areas, the ability to use this information in appropriate contexts did not generalize and communicative ability, both comprehension and expression, remained severely impaired.

Procedures

In January 1980, therapy was re-directed toward increasing overall communicative ability i.e., competence by utilizing the contexts in which communication (verbal and non-verbal) might occur. Situations were contrived to use the subject's environment as stimuli and the use of specific illocutionary speech acts (requests and assertions) were structured to occur in response to the context. Reinforcement was verbal and/or gestural (a nod, a smile, a touch, etc.).

Naming Ability

Familiar objects in the subject's environment (teeth, glasses, blanket, door, etc.) were used as vocabulary items. Initially, the subject imitated a verbal stimulus naming the object, but then the object alone elicited the correct response. These items were then used in a sentence completion task: (blanket) keeps you warm, blanket keeps you (warm) .

In addition, the verbs "open", "close", and "push" were introduced. Situations (purposely closing the curtains or door or simply not moving) were contrived to elicit either a gestural or a verbal response. Although initially responses were elicited, use of these verbs generalized to other contexts and then were used spontaneously.

Use of Illocutionary Acts

To improve the subject's comprehension of the specific stimuli

used and the appropriate response needed to communicate, auditory input to the subject was minimal. Instead, gestural input was used and then paired with controlled auditory input (2-3 word phrases). Gradually, the use of only gesture or an auditory stimulus elicited the appropriate response. If the subject did not comprehend the stimulus, she was instructed to communicate verbally "what?" or to demonstrate (gesturally) that more information, clarification, or a repeat was necessary.

Although the subject often did communicate lack of understanding or confusion non-verbally, the verbal expression of "what?" seldom occurred during the initial sessions. However, within a few weeks, the subject began to use this strategy spontaneously in other situations.

In addition, initially it was observed that the subject did not initiate speech and the few verbal responses made were usually single words and not always appropriate to the context. Structuring the environment and the context in which communication might occur resulted in the subject beginning to make both requests ("push", "open", "go") and assertions - specifically describing what she saw in the environment ("pretty bird", "no sun, oh my").

Appropriateness of Yes-No Responses

Utilizing the context in which communication might occur also resulted in an increase in the appropriate usage of "yes" and "no". Pictured information (a matching task), various objects in the environment, and previous tasks served as stimuli. Instructions to the subject were gestural or verbal requiring a verbal or a gestural "yes" or "no" response.

With this task and others, the use of silence and pause time within and between tasks was found to be important. It often facilitated a verbal response from the subject and reduced her tendency to persevere.

Results

Directing therapy toward increasing communicative competence over a four month period resulted in an increase in naming ability for objects from a baseline of 30% to 85%. The appropriateness of yes-no responses to selected stimuli also increased from 60% to 100%.

In addition, the subject made significant gains in the use of illocutionary acts (initiation of speech requests and assertions). At the beginning of therapy, the subject did not communicate in this manner, but utilizing the context in which communication might occur resulted in the subject communicating appropriately (verbally or gesturally) approximately 85% of the time.

Rationale

One of the most significant problems in using a traditional therapy approach with an aphasic individual (specifically in a long term care facility) is a lack of generalization or carry-over of communication skills to the individual's daily activities. Part of this may be due to the manner in which the re-training of communication abilities is attempted. Structured therapy is important, but must be structured to utilize the individual's environment and to focus on the contexts in which communication may occur, or indeed, needs to occur.

Consequently, throughout therapy, an attempt was made to increase the subject's awareness of and participation in the environment, utilizing the environment (people, situations, objects, etc.) to determine what communicative abilities were retained and to analyze how language "worked" in these situations.

Conclusions - Implications

Although this type of intervention may not appear to be significantly different from the traditional approach, it appears that perhaps what was important was not specifically what was done, but rather, how it was done.

In this approach, the therapist continued to provide stimulation (necessary in the process of re-teaching language, Schuell et al 1965) but the amount and type of stimulation was strictly controlled. Initially, auditory stimulation was seldom used or was paired with a gestural stimulus. In addition, there were periods of silence and pause time when no stimulation was provided. This required the therapist to carefully monitor her behavior and often to wait for responses to occur. Depending upon the context of the situation, often the subject would "fill" this time by making assertions or in some instances, requests to either continue or terminate the session.

The use of illocutionary acts in everyday activities appears to have generalized. The staff reports that the subject has begun to request "more coffee" and that the curtains in her room be "open". Another interesting observation is that those in the subject's environment feel she is more confident in her ability to communicate.

Based upon these results, it appears that structuring the environment and utilizing the contexts in which communication might occur is an effective procedure for determining to what extent the pragmatics of language remain intact.

In addition, using this type of pragmatic intervention results in improvement in the ability to communicate and to use this ability in contexts outside of the therapy situation.

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