VETERANS ADMINISTRATION COOPERATIVE STUDY ON
THE EFFECTS OF SPEECH AND LANGUAGE THERAPY ON RECOVERY
FROM APHASIA: The Design

Robert T. Wertz, Ph.D.; Robert H. Brookshire, Ph.D.;
Pat Holtzapple, M.A.; D. J. Hubbard, Ph.D.; Bruce E.
Porch, Ph.D.; and Joyce A. West, Ph.D.

In Collaboration With

John F. Kurtzke, M.D.; Thomas Friden, Ph.D.;
James Klett, Ph.D.; Joseph Bicknell, M.D.;
Violet Matovitch, M.D.; Gerald K. Morley, M.D.;
James Pierce, M.D.; and Ernesto Resurreccion, M.D.

(Abstract)

Previous reports on the efficacy of speech and language therapy with aphasic adults show conflicting results. None of the previous investigations have employed a random selection of patients or attempted to control for age, severity of aphasia, etiology, or amount of treatment.

In July, 1973, Speech Pathology services in five cooperating Veterans Administration Hospitals engaged in a cooperative study to determine the effects of speech and language therapy on recovery from aphasia. Each hospital is providing aphasic patients who receive 44 weeks of traditional speech and language therapy and aphasic patients who receive 44 weeks of non-traditional speech and language therapy.

Criteria for patient selection are: patients who have sustained a left hemisphere cerebral thrombo-embolic episode, who are 4 weeks post onset at the time of entrance into the study, who are between the ages of 40 and 80 years, who obtain an overall score between the 15th and 75th percentile on the Porch Index of Communicative Ability on their initial test, who are literate in English, and who agree to participate in the study. Patients who meet these criteria are randomly assigned to either Group A (traditional speech and language therapy for 44 weeks) or Group B (nontraditional treatment emphasizing problem solving with no direct manipulation of speech and language for 44 weeks). A battery of five speech, language, and intelligence measures are administered to all patients at the following points in time: 4, 15, 26, 37, and 48 weeks post onset. Patients in Group A receive four hours of individual, clinician directed treatment and four hours of supplemental, machine assisted treatment each week. Patients in Group B receive four hours of group therapy and four hours of supplemental, recreational therapy each week.
Appropriate statistical analysis, including descriptive statistics, analysis of covariance, and correlation techniques will be used to answer the following questions: first, what is the rate and degree of recovery from aphasia in Group A and Group B?; second, does Group A show significantly more improvement than Group B?; third, if Group A patients display significantly more improvement than Group B patients, at what points in time during recovery are the effects of Group A treatment observable?; fourth, what are the relationships among selected variables (e.g., age, education, etc.) and recovery from aphasia?; fifth, what are the effects of coexisting motor speech disorders on recovery from aphasia?; sixth, what are the relationships among the speech and language measures and neurologic and biographic data?; seventh, which language abilities improve at which points in time during recovery from aphasia?; eighth, what are the effects of initial severity on recovery from aphasia?; and ninth, can the amount of recovery at 48 weeks post onset be predicted using four week post onset speech and language scores?