

Kelsch, J. E. (1979). *Amer-Ind recognition in patients with aphasia*. Unpublished master's thesis, Purdue University, West Lafayette. Lyle L. Lloyd (Advisor): 88 pages of text, 76 references, 3 appendices, 17 tables, and 2 figures.

The purpose of the present study was to define the ability of aphasic subjects to interpret a series of standardized symbolic gestures (Amer-Ind). It was undertaken because previous studies have presented widely varying results. It was hoped that the present study, besides clarifying some aspects, might aid in the more effective application of gesture-based intervention strategies.

The questions this study attempted to answer included whether severity of aphasia was related to Amer-Ind recognition ability; whether Action target pictures would elicit significantly higher correct scores than Object picture targets; and whether subjects, when incorrect, would more often chose a related than an unrelated foil.

Fifteen male aphasic subjects, five in each of three aphasia groups, were tested for visual acuity and were trained through gestures to perform a pointing response. A 24-item Amer-Ind Recognition Test (ART) was administered through live presentation. The task for each subject was to point to one of four line drawings after a sign was demonstrated. Responses were recorded, and a post-test was administered to all patients to assure that stimulus picture recognition was adequate.

Data indicated that subjects, regardless of the severity of their aphasia, performed equally well on the two subtests of the ART. Each of the two ALPS subscores, which were the basis of the severity rating, were considered relative to Amer-Ind recognition ability. In this case, a modest correlation was found to exist between the Listening subscore and Action picture recognition as measured on the ART.

Significantly more of the Action pictures than the Object pictures were correctly identified. When subjects incorrectly guessed the target, they more often chose a related foil than the two other unrelated foils. All signs were also judged as approximately equal in difficulty.

Because verbal communication was not relied upon in the design, this study was thought to have tapped gestural communicative abilities. Amer-Ind is discussed as an important clinical tool in aphasia rehabilitation, despite some claims that gestural ability is impaired in aphasia.

An apparent error response bias was discussed relative to a future study investigating the potential mechanisms that underlie semantic confusions. The relationship between the different subtypes of gesture, gross gestures involving the trunk versus fine gestures of the limbs and fingers, and spontaneous verbalization are also discussed. A potential neuroanatomical substrate is hypothesized which may explain the physiological takeover of lost or damaged functions.