

Formal and Informal Testing
Round Table Discussion

Margaret Lemme
University of Denver
Denver, Colorado

The formal and informal testing discussion group was composed of clinicians and clinical researchers. Two questions were presented initially by the narrator in order to provide some structure and direction for the discussion:

1. What are the operational definitions of a formal test and an informal test?
2. What are the purposes for testing - diagnosis and classification, prognosis, treatment selection and planning?

The following is a brief summary of the flow of subsequent discussion, including major issues raised and respondent consensus where appropriate.

Initially, in attempting to operationally define informal and formal tests, it was suggested that informal tests are those "tests" or tasks administered in an unstructured, conversational fashion, e.g., bed-side tasks or initial interview, which are subjectively scored or interpreted. Formal tests are those instruments which are published, elicit S-R information, and adhere to a given structure and set of principles. The structure and set of principles include evidence of validity and reliability (test-retest, inter- and intra-judge) as well as specific test format, task instructions, and scoring procedure information. An example of an informal test would be the Token Test(s) and an example of a formal test would be the Porch Index of Communicative Ability. Questions raised, albeit unanswered in the discussion, were; if a clinician deviated from formal instructions, or any were manipulated in a formal test, or if the task were taught in treatment, would the results from a formal test then become informal?

A recurrent theme in the discussion was the importance of information needed to make statements about a patient, particularly in the area of functional communication abilities. Repeatedly, it was emphasized that patients perform differently in structured and in informal, unstructured situations. The familiar clinical example was discussed of the patient who gives the appearance that he "understands everything auditorily" and has intact functional auditory comprehension (perhaps because he gets additional and/or redundant information from the environment through other modalities), but does not perform well on formal assessment of auditory comprehension. It was suggested that the clinician needs information about maximal and minimal auditory comprehension in a structured situation and about functional auditory comprehension in order to make a complete diagnosis. Otherwise, a clinician may become "tunnel visioned" by formal

test instruments and miss meaningful informal information from "real world" functioning. While the clinician needs formal test results to plan treatment, these data too should be supplemented by informal results about how the patient functions in and with the environments around him.

At this point, the concern for assessing a patient's strategies as he attempts to adapt to the world was raised. Using strategies more than S-R relations as a basis for communication treatment seems appropriate; however, to date we have no formal evaluation tool to assess how well a patient adapts to his environment, his affect, or his ability to generalize and/or "switch" from task to task. Although clinicians could develop a formal assessment tool by systematically manipulating the antecedent event in an S-R paradigm, presently they appear to rely on (1) asking the patient, and/or (2) informal, yet systematic, clinical observation to evaluate patient strategies. While the group was discussing observation and evaluation of patients, it was noted that student clinicians are frequently quite adept with formal tests; however, they are unable to obtain any information from informal measures if formal testing is inappropriate or impossible. The value of informal measures, then, seems to be greater with experienced clinicians who have a "system in their heads" or use items from formal tests without a score sheet. It was mentioned that the reliability of informal observations can be poor even with an experienced clinician and we would not want to run the risk of following into a narrow "methodist-episcopal" set apparently used by some health professionals.

Returning to the question of information needed to plan appropriate communication treatment, the consensus was that both formal and informal test information is necessary. Formal test data delineate what the patient's communication abilities and deficits are within the various input and output modalities in a structured situation; informal test data give a "gestalt" of the patient as he functions as a social being within his environment. It was suggested that formal scores and informal data are not "incompatible and probably reflect the same information." More specifically, by obtaining both, the clinician can see the "effect of formal scores" on how the patient responds socially. The majority of the group members agreed that formal test results provided documentation of diagnostic speech/language category and facilitated communication between Speech Pathologists, while informal results were insufficient to provide enough information to categorize patients and frequently lacked reliability.

With the stated need to assess the patient's functional communication abilities in his environment, family members, the patient's friends, other patients, and other health professionals can act as vital informants and "diagnosticians." In addition, their help can and should be enlisted in stimulating communication with the patient within his environment not just within the speech/language clinic. It was noted that informal information collected by the speech pathologist can also aid in communicating with acute care hospital staff and the patient's family members, especially when there is a noticeable discrepancy between informal functional results and formal test results.

It appeared that the majority of clinicians plan their initial treatment program based on a given patient's formal test results (although this is difficult to obtain in an acute care setting), informal testing and observations, and informant information when available. Clinicians then modify their program based on what happens in treatment. For example, if

phonetic similarity, semantics, and frequency of word occurrence appear to affect auditory comprehension for a given patient, these parameters are manipulated.

Formal test data assist the clinician in maintaining objectivity in treatment. Formal test data provide information about all modalities rather than allowing the clinician to maintain a "biased set" (e.g., "He is a nonfluent aphasic") about the patient's functioning, or to become too comfortable with a single treatment paradigm. In addition, formal test-retest data provide a measure of change in communication skills brought about by speech/language treatment rather than allowing the clinician to think that the patient has changed based on informal observation.

Discussion suggested that a minimum diagnostic battery might include an oral peripheral examination, a short form of the Token Test, and a language screening through general conversation followed by an aphasia battery if indicated. Some discussants were concerned that under these circumstances the "mild patient" would be missed, and they questioned the advisability of "screening" for aphasia or auditory processing deficits. An example was the patient who performs adequately on the auditory subtests of the Porch Index of Communicative Ability and on the Token Test, but who demonstrates mild, subtle auditory processing problems when taxed. At this point, it was mentioned that premorbid vocation and life style make a difference in what you test and what you consider a deficit. If a patient's communication system is good enough for his life then it should be good enough for the clinician. Perhaps with this type of patient an appropriate question is "What's bothering you?" Again the importance of a measure for functional communication was raised and the experimental addition of the ROPI (Rating of Patient Independence, Porch) was mentioned as a baseline measure of patient independence.

The formal audiological tests typically requested by this group of aphasiologists are (1) pure tone screening (A/C and B/C), and (2) speech tests (SRT and speech discrimination) when possible. The group was divided on the use and application of more specialized audiological tests, including brain stem and hemispheric dominance tests. Some felt this data had research use, but not implications for clinical treatment; others felt the information was useful both for research and for clinical application. The latter group suggested it could lead to different treatment for a given patient, e.g., helping to delineate appropriate candidates for MIT therapy.

The last area of discussion was what tests are currently used in a typical diagnostic session in the various facilities.

New York V.A.H.: (1) Porch Index of Communicative Ability;
 (2) Minnesota Test for Differential Diagnosis of Aphasia (long form);
 (3) Token Test; (4) Colored Progressive Matrices; (5) Peabody Picture Vocabulary Test; (6) Peripheral Speech Mechanism Exam (including primitive reflexes, and oral-nonverbal movements); (7) Word Fluency Measure; others when indicated.

Albuquerque V.A.H.: (1) Porch Index of Communicative Ability;
 (2) Colored Progressive Matrices; (3) Columbia Mental Maturity Scale;
 (4) Token Test; (5) Videofluoroscopy (swallows); (6) Word Fluency Measure;
 (7) Motor Speech Evaluation.

Fort Howard V.A.H.: (1) Aphasia Language Performance Scales;
 (2) Porch Index of Communicative Ability; (3) Token Test.