The need for thorough and sound evaluation of clients has been a mandate for occupational therapy since the early 1980s (Yenxa, 1981). Several treatises have been printed on the subject in various publications of the American Occupational Therapy Association (AOTA) (e.g., American Journal of Occupational Therapy, Occupational Therapy News, and Mental Health Focus: Skills for Assessment and Treatment [Robertson, 1988]). The American Occupational Therapy Foundation (AOTF) has funded several evaluation development research projects in the past decade and states as one of its funding priorities the development and standardization of instruments for clinical practice and research (AOTF, 1990). An official AOTA document has been published outlining the scope and nature of competencies required in evaluation and assessment in occupational therapy (Maurer, Barris, Bonder, & Gillette, 1984). The recently revised “Essentials and Guidelines for an Accredited Educational Program for the Occupational Therapist” (American Medical Association [AMA]/AOTA, 1991a) includes requirements for the provision of instruction in basic measurement concepts at the professional level.

These efforts by the professional association and individuals reflect the concerns that (a) evaluation instruments and techniques used by occupational therapy personnel are able to serve the purpose for which they were intended, and (b) occupational therapy personnel are prepared to effectively use and understand them. These concerns underlie the belief that we as occupational therapy personnel must be competent evaluators in order to best serve our clients. They are similar to the concerns that affect testing and assessment in other health care professions. The profession of psychology has given considerable attention to measurement issues and has identified two major ethical concerns surrounding the uses of and potential abuses in evaluation: user competence and test adequacy (Keith-Spiegel & Koocher, 1985). In this paper I consider these ethical concerns and their relevance for occupational therapy.

User Competence
An effective occupational therapy evaluator must be able to do more than make observations and record them. Some of the issues surrounding user competence that raise ethical concerns are adequate and appropriate training, interpretation of test results, and theoretical orientation.

Training
Are occupational therapy personnel adequately prepared to do valid and reliable evaluation? In 1984, Maurer et al. identified basic, entry-level, advanced, and scholarly research competencies for occupational therapy personnel in evaluation. These authors proposed that all occupational therapy evaluators should have the following basic competencies:

- Recognize the value of standardized tests
- Distinguish standardized tests from nonstandardized ones
- Distinguish objective from subjective data
- Know that using standardized assessments in an unstandardized (adapted) manner invalidates these assessments
- Recognize one’s own abilities and limitations in using evaluations

Entry-level competencies at the technical and professional levels of practice are beyond these basic competencies but include them. On the basis of Maurer et al.’s document, we can assume that personnel are prepared to do evaluations of clients within the scope of their educational preparation and specific job responsibilities. However, this may not always be the case. The latest “Essentials and Guidelines for an Accredited Educational Program for the Occupational Therapy Assistant” (AMA/AOTA, 1991b) says little about requiring students to have a background in evaluation beyond structured observations, interviews, histories, and tests. Standardized and nonstandardized tests and evaluations are to be administered under the direction of an occupational therapist. The new Entry-Level Role Delineation for Registered Occupational Therapists (OTRs) and Certified Occupational Therapy Assistants (COTAs) (AOTA, 1990) indicates that certified occupational therapy assistants do evaluation only after demonstrating service competency. However, clinical
practice in some specialty areas (e.g., gerontology, psychosocial dysfunction) and most practice in rural areas (where minimal occupational therapist supervision is available) suggests that occupational therapy assistants often conduct and interpret evaluations independently, especially in the area of activities of daily living. Are these occupational therapy assistants adequately and appropriately prepared to make the judgments proposed by Maurer et al. (1984)? Probably not.

Williams (1988), in citing the Technical Report of the Test Users Qualifications Working Group of the American Psychological Association, identified seven areas in which occupational therapy evaluators should be competent: proper test use, psychometric knowledge, comprehensive assessment, appropriate use of scores, accuracy of scoring, appropriate use of norms, and interpretation. Many of these general knowledge domains, which she stated "every [occupational therapy] practitioner should understand in order to perform competent testing" (p. 1.125), include an ethical dimension. Examples are understanding the limitations of the norm base for the evaluation (how it is appropriate or inappropriate for one's population), understanding that an evaluation can incorrectly classify the client, providing the appropriate testing climate and understanding how situational aspects may invalidate the results, not allowing unqualified persons to use the evaluations, and not violating copyright on an evaluation. For occupational therapy personnel to conduct themselves as ethical evaluators, they must have adequate psychometric knowledge to make the correct decisions. Both Maurer et al. (1984) and Williams (1988) assumed educational preparation in the areas they identified. This may not always occur. It would probably be difficult to get agreement among occupational therapy educators as to what constitutes adequate preparation in scientific measurement concepts. There is likely great variation among schools regarding requirements in this area. Consequently, the occupational therapist with inadequate preparation faces an ethical dilemma when expected to correctly use the psychometrically sophisticated evaluations available in some occupational therapy specialty areas (e.g., pediatrics, psychosocial dysfunction).

**Interpretation of Test Results**

When occupational therapy personnel make clinical decisions about clients on the basis of evaluation results, are they able to interpret reliability, validity, difficulty, and discrimination data? Do they consider the effect of using standardized evaluations in nonstandardized ways? The adaptation of occupational therapy evaluations to specific clinical programs and needs is common practice in all specialty areas. It would probably be difficult to find a clinical occupational therapy program anywhere that has not modified a published evaluation to meet its needs. The result is a different evaluation than the one on which reliability and validity data and normative data (if the evaluation is norm-referenced) are reported; test results using this different evaluation cannot be interpreted according to the reported data. We can only assume that occupational therapy personnel who make decisions to modify evaluations are unaware of the ethical implications of alternating another person's work (probably without their permission) and interpreting the obtained evaluation results.

The interpretation of evaluation results on norm-referenced standardized instruments is highly suspect when the client being examined is not a member of the normative population. Problems in interpretation arise for evaluations that are developed with a specific clinical population in mind. Evaluation developers need to inform users of the intended clinical population. Evaluation users should interpret evaluation results of clients other than the intended population in light of information about these clients from other resources (Anastasi, 1988).

**Theoretical Orientation**

Williams (1988) identified another factor of the test user that must be considered for sound evaluation: the relationship of an evaluation instrument or technique to the user's theoretical frame of reference. A projective technique would be incompatible with a behavioral and functional frame of reference. Measures of life roles and stress management would fit an occupational behavior orientation nicely. Williams (1988) stated, "The key to instrument selection is knowing what you want to measure and selecting an instrument that will provide you with information about that variable" (p. 1.126). Occupational therapy personnel are ethically responsible to their clients to know what aspects of the client they need to evaluate and treat and why.

Another side to the issue of theoretical orientation is the use of occupational therapy evaluations by nonoccupational therapy personnel. Evaluations developed by occupational therapists that reflect a specific occupational therapy theoretical orientation (e.g., the Bay Area Functional Performance Evaluation [Williams & Bloomer, 1987] and occupational behavior, the Assessment of Occupational Functioning [Watts, Kielhofner, Bauer, Gregory, & Valentine, 1986] and the Model of Human Occupation [Kielhofner & Burke, 1980]; the Sensory Integration and Praxis Tests [Ayres, 1988] and sensory integration) may be interpreted incorrectly (or at least differently) by nonoccupational therapy users. Does the profession or the test developer have a responsibility to protect evaluations from nonoccupational therapy use? Likewise, do occupational therapy personnel who use nonoccupational therapy evaluations—for example, evaluations coming out of psychology, physical therapy, or nursing—have a responsibility to know the theoretical orientation of the test developer? Without this knowledge it might be unethical for occupational therapy personnel to use these nonoccupational therapy evaluations.

The factor that seems to underlie all the ethical issues surrounding the user's competence in evaluation is knowing one's own limitations and abilities and functioning within those parameters. Occupational therapy personnel are professionally and ethically obligated to use only those evaluations for which their education and experience are sufficient and to obtain specialized training to use instruments and techniques critical to their practice area (Maurer et al., 1984).

**Test Adequacy**

Just as a test user and evaluator must meet certain criteria to be able to do their jobs effectively, so must a test. But a test that meets certain criteria for one

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purpose may be inadequate or inappropriate for another (Keith-Spiegel & Koocher, 1985). An occupational therapy evaluation that is adequate for use with a client as a screening device before treatment begins would probably be inappropriate for later use as a measure of treatment effectiveness. The test's characteristics determine its adequacy for a specific purpose.

Many publications are available, both within and outside of the occupational therapy literature, that identify the characteristics of valid and reliable evaluations. This information is readily available to all occupational therapy personnel in such resources as Mental Health Assessment in Occupational Therapy (Hemphill, 1988), The Role of Occupational Therapy With the Elderly (Davis & Kirkland, 1986), and Mental Health Focus: Skills for Assessment and Treatment (Robertson, 1988). Many of these evaluation characteristics were mentioned in the preceding section in the context of the test user's need to be knowledgeable about them in evaluation use. But the responsibility goes beyond the test user; it primarily rests with test developers and publishers. It is these parties who are best able to provide users with access to information about test development, such as theoretical orientation, intended clinical population, data on validity and reliability, potential areas of test bias, administration and scoring procedures, interpretation of tests results, and qualifications of test users. Test developers and publishers are also responsible for not marketing an evaluation before it is ready for clinical use and marketing it only to qualified users.

Many occupational therapy evaluations were published with minimal test development reported or, more likely, completed. Even more common was the development of evaluations for specific clinical programs, known as homemade evaluations. A trend away from these two practices in recent years has occurred as the profession has become more sophisticated in its use and understanding of measurement concepts. This is evidenced over the past several years by the publication of evaluations that reflect more complete development, including validity and reliability research, such as the Allen Cognitive Level Test (Allen, 1985), the Assessment of Motor and Process Skills (Fisher, 1990), the Assessment of Occupational Functioning (Watts et al., 1986), the Bay Area Functional Performance Evaluation (Williams & Bloomer, 1987), and the Milwaukee Evaluation of Daily Living Skills (Leonardelli, 1988), and the publication of clinical norms for commonly used evaluation techniques (Mathiowitz, Vollland, Kasshman, & Weber, 1985). These evaluations as well as updated versions of older ones are setting the current standard for occupational therapy evaluation. To ensure that test users are able to make sound, ethical decisions in the use of evaluations, test developers and publishers are ethically bound to provide the information on which decisions can be based.

Conclusion

The effective occupational therapy evaluator understands the clinical population well, knows appropriate evaluative techniques and how to use them, and gathers other relevant information that cannot be gained from specific evaluation procedures. He or she also behaves ethically within the constraints of his or her psychometric and measurement knowledge.

Ethical behavior in evaluation is addressed in the "Occupational Therapy Code of Ethics" (AOTA, 1988) in Principle 2. Occupational therapists are required to recognize the need for competence and participate in continuing professional development, function within the parameters of their competence, and refer clients to or consult with other providers when additional knowledge and expertise is required. Therapists who do otherwise are not only behaving unethically, but also are exposing themselves to liability if they perform functions for which they are unqualified (Welles, 1988).

References


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THE ISSUE IS provides a forum for debate and discussion of occupational therapy issues and related topics. The Contributing Editor of this section, Julia Van Deusen, strives to have both sides of an issue addressed. Readers are encouraged to submit manuscripts discussing opposite points of view or new topics. All manuscripts are subject to peer review. Submit three copies to Elaine Viselecin, Editor.
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