The American Occupational Therapy Association
Advisory Opinion for the Ethics Commission

Outdated and Obsolete Tests and Assessment Instruments

The evaluation process and use of test and assessment instruments in occupational therapy practice should be designed to benefit the client by accurately reporting the client’s capabilities (strengths) and limitations (deficits and weaknesses). Occupational therapy practitioners have an ethical responsibility to provide proper individualized evaluation and a plan of intervention for all recipients of occupational therapy service (Principle 1A of the Occupational Therapy Code of Ethics (2015) [referred to as the “Code”]; American Occupational Therapy Association, 2015).

In addition, occupational therapy practitioners have a responsibility to avoid the use of outdated or obsolete tests and assessments, as well as data obtained from such tests, in making intervention decisions or recommendations (Principle 1C of the Code). This principle also encourages occupational therapy practitioners to provide evaluations that are evidence-based and within the recognized scope of occupational therapy practice. Therefore, occupational therapy practitioners also have a responsibility to determine when a test or assessment is considered outdated or obsolete and would not provide current and relevant data from which to develop an intervention plan and program.

THE ISSUES

Tests and assessment instruments most often become outdated and obsolete because new revisions are published. Occupational therapy practitioners should be aware of revisions and make an effort to determine whether any of the reasons for revision are pertinent to the tests or assessments used in their practice areas. According to the Standards for Educational and Psychological Testing (American Educational Research Association, 1999),

- tests and their supporting documents (e.g., test manuals, technical manuals, user’s guides) are reviewed periodically to determine whether revisions are needed. Revisions or amendments are necessary when new research data, significant changes in the domain, or new conditions of test use and interpretation would either improve the validity of interpretations of the test scores or suggest that the test is no longer fully appropriate for its intended use. As an example, tests are revised if the test content or language has become outdated and, therefore, may subsequently affect the validity of the
The problem of outdated and obsolete tests and assessment instruments is not unique to occupational therapy practice. Any discipline or profession that uses standardized tests and assessment instruments to gather client data has a similar concern. However, certain types of data tend to require more frequent updating. Such data include developmental, cognitive, psychological, social and contextual, and environmental factors. Although knowledge about anatomical and physiological factors does change, the rate of change tends to be slower. Therefore, the normative data on range of motion tend to change less frequently than the normative data on child development. In addition, normative data that are appropriate for one segment of the population do not necessarily accurately measure another segment. Older tests and assessment instruments might have been based on normative data from a select group of participants who do not have the characteristics of the client the occupational therapy practitioner is evaluating. Comparing a person with normative data from a dissimilar group does not accurately indicate that person’s capabilities and limitations.

Although there is no definitive checklist to determine whether a test or an assessment is outdated or obsolete, some general guidelines can be stated. Any test or assessment instrument to be used with clients must meet the following criteria:

- The test or assessment instrument should be the most current edition or version available.
- The content of the test or assessment instrument should be based on a currently accepted theory, frame of reference, or model of practice.
- The content of the test or assessment instrument should be recognized as within the scope of occupational therapy practice.
- If a similar test or assessment instrument with essentially the same content was published more recently than the test or assessment being considered for use, consider using the more recent test or assessment instrument if feasible.
- Normative data should have been updated or reviewed for need to update within the past 20 years or other appropriate length of time.
- The sample on which the normative data are based should include participants with the
characteristics of the client being assessed (e.g., age, sex, ethnicity, symptoms, diagnosis).

- A literature search should be performed to ascertain that no statements in a recent publication have questioned the validity or reliability of the test or assessment instrument and provided evidence to substantiate the questions posed.
- The language of the test or assessment instrument should be consistent with current usage.
- The test items should be the same as or similar to those in daily use to measure functional ability, occupational performance, or participation.
- The test instrument should be in good condition (i.e., all parts available and in working order).

CASE ILLUSTRATIONS

Jamie, an occupational therapist, needs to evaluate Geoff, age 26 months. She chooses the Peabody Developmental Motor Scales (Folio & Fewell, 1992) and the Bayley Scales of Infant Development (Bayley, 1969) because both are recognized tests of infant development. She administers and scores each test according to the instructions but completes only the motor section of the Bayley. By previous arrangement, the psychologist completes the mental and behavioral sections of the Bayley. In the staff meeting, the psychologist tells team members that the test results Jamie provided in her report are meaningless and should be disregarded because the normative data for both tests are out of date. Jamie is asked to retest Geoff using current editions of the two tests. The Peabody Developmental Motor Scales were updated in 2000 (Folio & Fewell, 2000), and the Bayley Scales of Infant and Toddler Development were updated in 2005 (Bayley, 2005).

Sara is a pediatric occupational therapist who administers the Test of Visual–Motor Skills—Revised (Gardner, 1995) and the Test of Visual Perceptual Skills (3rd ed.; Martin, 2006) to Laura, age 12, to assess her perceptual and perceptual–motor skills. Laura scores below her age level on both tests. At the guidance team meeting, the teacher asks Sara to explain the conceptual model or frame of reference on which the tests are based to help the teacher better understand Laura’s perceptual problems. Sara is unable to find any information in the test manuals regarding a model or frame of reference. The guidance team requests that Sara retest Laura using
perceptual and perceptual–motor instruments that provide a model to be used for understanding the test results and for supporting intervention in the classroom.

Ken, an occupational therapist working in a rehab hospital, administers the Cognitive Assessment of Minnesota (CAM; Rustad et al., 1993) to Mr. Clausen, age 57, who had a cerebral vascular accident 2 weeks ago. Ken skips the Money Skills section because he cannot find a 50-cent piece and the Visual Neglect section because the reproducible form is missing from the test manual. He summarizes the test results he has completed, but his supervisor refuses to allow them to be entered in Mr. Clausen’s chart because the results are incomplete. The supervisor suggests that Ken look for the missing pieces of the CAM or retest Mr. Clausen with a similar assessment instrument.

DISCUSSION

As the cases illustrate, tests and assessment instruments that do not meet the bulleted criteria outlined in this article may not accurately report a client’s capabilities and limitations. Such tests and assessment instruments may not benefit the client if one or more of the following are true: The normative data are out of date, the normative data sample did not include certain ethnic or minority groups, the normative data sample did not include a range of ages from child to adult (if relevant), test items have become dated and do not reflect current language or life situations, errors in administering and scoring have been observed and reported in published studies, validity or reliability has been questioned by researchers, or the conceptual model of the instrument is missing or may not be consistent with currently accepted theory (Adams, 2000; Butcher, 2000; Okazaki & Sue, 2000; Silverstein & Nelson, 2000; Strauss, Spreen, & Hunter, 2000). Inaccurate measurement during the evaluation process may result in intervention that is not needed or that does not address existing limitations. Sources of inaccurate measurement may include errors in administration and scoring or failure to administer some parts of the instrument altogether. The client may not receive the full benefit of occupational therapy services because important limitations or potential capabilities were not identified or were misidentified during the evaluation process. The intervention might have been planned and implemented on the basis of incomplete, inaccurate, or missing facts and data.

Occupational therapy practitioners have an ethical responsibility to select, administer, score, and interpret tests and assessment instruments that accurately reflect the client in the context of time and circumstances that are important to that client. Tests and assessment instruments that do
not accurately measure the client should not be used unless the potential inaccuracies are noted in the assessment summary and allowances are made for inaccurate interpretation. The occupational therapy practitioner should be knowledgeable about each assessment instrument used to measure client capacities and limitations. Any deficiencies in the application of the test or assessment instrument should be clearly stated in documentation reporting the data or summary.

For example, the dynamometer is basically a strain gauge that must be periodically recalibrated—like retuning a piano—to accurately measure grip strength. Arrangements and a maintenance schedule to have dynamometers recalibrated—or new ones purchased—are the responsibility of the occupational therapy practitioner. A second example is perception tests, which were originally published with norms established primarily for children. In recent years, many of these perception instruments have been revised to include new norms for adults. Use of the newer instruments increases the potential for identifying perceptual dysfunction that may be interfering with the adult client’s ability to perform daily living tasks and continues to be effective in assessing children. As tests and assessment instruments improve to measure more aspects of client capabilities and limitations, occupational therapy practitioners must be alert to the newer measurement tools and incorporate them into the evaluation process.

A third example is a developmental test that may become out of date because of changes in overall health, nutrition, and child-rearing practices. For example, the average age of walking has decreased from 18 months in the 1940s to under 1 year today. A development test that was standardized 40 or 50 years ago might not identify a performance deficit that should be addressed to improve the child’s function in today’s society.

A fourth example is a test without an identified conceptual model or theory or with a discarded model or theory. The conceptual model provides the basis for interpreting the significance or meaning of test results for performance in everyday life. If knowledge of a foreign language is viewed as important for everyday functioning, then not knowing the language is important. However, if the ability to speak another language is not viewed as important, then a test result of ability that is three standard deviations below the mean may be an accurate measurement but probably can be interpreted as insignificant to performing daily tasks. A fifth example is test items that are out of date, such as those that ask the client to identify a 50-cent piece. Because 50-cent pieces are not in common circulation today, such identification is not useful in interpreting the client’s ability to handle coins or make change correctly.
Finally, tests and assessment instruments best provide useful information when the data are consistent with occupational therapy theory. Occupational therapy theories stress the importance of understanding and managing the process by which a task, activity, or occupation is performed. Some assessment instruments primarily measure the outcome or end result without providing a means of measuring the process (sequence or steps) by which the outcome or end result is obtained. Such assessment instruments may be useful for reporting to other professionals, families, or agencies about the results of therapy but are limited in assessing the need for occupational therapy intervention. Understanding the conceptual basis of an assessment can increase the chances that the information obtained will be useful in planning and implementing an occupational therapy service program.

SUMMARY
Occupational therapy practitioners use tests and assessment instruments as a means of gathering data about a client during the evaluation process. The tests and assessment instruments should provide accurate and up-to-date data about the client being evaluated. Occupational therapy practitioners must assume responsibility for selecting, administering, scoring, and interpreting tests and assessment instruments that are not outdated or obsolete. Although definitive guidelines for determining whether a test or instrument is outdated or obsolete do not exist, useful guidelines—such as the criteria outlined in this chapter—can and should be observed by occupational therapy practitioners.

REFERENCES


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This chapter was previously published in the 2010 edition of this guide. It has been revised to reflect updated AOTA Official Documents and websites, AOTA style, and additional resources.

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