

TABLE 5-3

### SELECTING A STANDARDIZED TEST

Developmental testing is most accurate when using standardized tests with strong psychometric parameters. Below are criteria that can be used to select an appropriate standardized test in pediatrics.

- Validity: The extent to which measurements are useful for making decisions relevant to a given purpose. Validity refers to the appropriateness, truthfulness, authenticity, and effectiveness of the test. Does the test measure what it was intended to measure?
  - Domain validity: This type of validity refers to the relationship of this test to other tests measuring the same domain or a similar construct.
  - Construct validity: This type of validity refers to the hypothetical construct or domain you intend to study. It defines what you intend to measure. The test content matches descriptors of the same concept described in research studies.
  - Face validity: The test makes sense to the person to whom it is administered. The individual “accepts” the test.
  - Content validity: The content of the test is narrowed to specific items or content that is essential for the domain that is being measured.
  - Concurrent validity: The results of this test concur with findings from other tests examining the same construct at the same time on the same individual.
  - Predictive validity: The test is able to predict future events or behaviors.
- Reliability: Will the test give the same results if used under the same circumstances?
  - Interobserver reliability: Does changing observer change the test score?
  - Decision-consistency reliability: Stability of decisions.
  - Test-rest reliability: Stability of individual scores when the test is given by a different examiner.
  - Intrarater reliability: This type of reliability refers to the consistency of test scores when the same examiner gives the same test. It indicates the stability of the measure.
  - Test-retest reliability: This type of reliability refers to the accuracy of the same test used in repeated measures for the same construct.

child is delayed, a more thorough examination could include *criterion-referenced tests*. Criterion-referenced tests assess a child’s task performance in relation to specific task criteria. Although criterion-referenced tests are helpful, reports must clearly state the limitations of the test results. Table 5-4 provides a helpful comparison of norm-referenced vs criterion-referenced tests.<sup>7</sup>

Often standardized assessments target discrete skills that may not translate into the overall skills needed by the child to successfully function in the home, school, and other social environments. Children from linguistically and culturally diverse groups benefit from alternate methods of assessment. Even for children who are within the mainstream culture, standardized assessments may reveal mainly what a child does not know and not necessarily what a child knows or is capable of learning. *Dynamic assessment* (DA), designed using Vigotsky’s model of cognitive development, can provide information about the child’s ability to respond to new learning experiences, revealing the child’s potential

to learn.<sup>8,9</sup> DA has also been shown to be a sensitive measure for children from culturally and linguistically diverse backgrounds.<sup>10</sup> Assessments can be devised to reveal important aspects of learning, including the child’s (1) ease at learning a new skill, (2) ability to focus attention on a task, (3) ability to complete a task, (4) ability to transfer skills to new tasks, (5) persistence, (6) enthusiasm, (7) planning skills, and (8) self-regulation.

Dynamic assessments are generally developed using a test-teach-retest model, using graduated prompting to see how much support the child requires to learn a new skill. With this mediated learning experience (MLE), the examiner can judge how much effort the child and teacher must expend for the child to learn a new task.<sup>11</sup> If the child learns a new skill easily, possibly more exposure is needed, not necessarily intervention. However, if intervention is indicated, the learning strategies and prompts that are most effective when working with the child can be identified.<sup>10,11</sup>