

Assessment Beyond IQ

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Validity of Intelligence Quotient Measures

The first intelligence test, the Binet-Simon Intelligence Test, was published in 1905 by Alfred Binet with the primary goal of identifying students who needed special help in school. As early as 1911, professionals in the field of psychology began to evaluate the validity of intelligence testing for people who had speech and language impairments or did not speak English. During this time in history, a wave of immigrants came into the United States through Ellis Island. As part of the immigration processing procedure, a form of intelligence quotient (IQ) testing was used to screen people for mental and physical disorders. However, the validity of these test measures became painfully obvious; tests were only administered in English, a profound disadvantage for the many who did not speak English. In 1911, Drs. William Healy and Grace Fernald observed that the Binet-Simon Intelligence Scale “helps very little where the language factor is a barrier” (Boake, 2002).

Almost 100 years later, children with severe physical and speaking impairments are still confronted with a similar test barrier. How can a test that requires a person to speak and write be valid for this population of children? Yet, parents move forward with this flawed IQ assessment process for two reasons: 1) this information is required for some special education program eligibility; 2) parents are attempting to understand their child’s capabilities and limitations. In addition to the concerns with the accessibility of intelligence testing, there also are concerns with the value of obtaining a single measure of capability. Perhaps Dr. Muriel Lezak summed up the issue of IQ test validity for this population of children best by stating, “This 70-year-old concept has outlived its usefulness. Neuropsychology needs to seek more appropriate alternatives to the IQ for describing and conceptualizing mental functioning.” (Lezak, 1988)

Application to Children with Disabilities and Their Education Plan

As defined by the Individuals with Disability Education Act (IDEA) in section §300.39, the purpose of special education is to “specially design instruction” for students with disabilities. This specially designed instruction is developed by a team of educators and the child’s parents and is outline in an Individualized Education Program (IEP). At the very minimum, the IEP should contain the following information:

- 1.) the child’s Present Level of Academic and Functional Performance (PLAFP)
- 2.) specific and measurable academic goals and objectives

3.) documented relevant services that will assist and support the student to reach their maximum potential.

Parents and educators need to keep in mind long-term needs, including optimal quality of life outcomes, when developing these areas of the student's IEP. As a formal part of the IEP meetings, transition planning (planning for life after high school) typically does not begin until well into adolescence. Some have argued that transition planning should infuse educational programs and planning beginning with entry into school (Kohler & Fields, 2003). A very important element of a student's transition planning is assessment.

A component of a school assessment plan includes traditional IQ testing, often referred to as psychological or psycho-educational testing. Psycho-educational testing can yield information about how a student compares to others in her grade or age group, individual strengths and needs, and recommendations to improve instruction. Appropriate assessments, which include tests that were originally developed with typically developing children in mind, in some instances can be presented in alternate formats; this process is necessary and fair for students with disabilities. Providing alternate formats could potentially allow even children with severe impairments to demonstrate their knowledge.

Current federal and state laws and regulations such as the IDEA 2004, No Child Left Behind (NCLB), and Free and Appropriate Public Education (FAPE) all echo the relevance of providing special education students with an education that will allow them the same quality and challenges of education that their typically developing peers receive. IDEA 2004 specifically states: "The purposes of this title are to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment and independent living." (Cortiella, 2006)

The Parents' Approach

Deciding that any child, especially a child with severe impairments, will participate in a comprehensive psycho-educational assessment should be a well-planned process. There are several things that parents can ask themselves in preparation:

- 1.) Do I understand what these assessments will measure?
- 2.) What is my role in the assessment of my child?
- 3.) How will I work with the assessor to identify ways that my child can best participate in the assessment?
- 4.) What type of information do I expect to obtain from these assessments?
- 5.) How can the final results and recommendations of the assessments be applied to my child's current education program, assist with long-term planning, and aid in day-to-day life skills?
- 6.) Am I prepared to receive the information that is gathered from this assessment whether it is positive or negative?

It is very important that the evaluator and parent approach the child's assessment by presuming that the child is competent and will be able to participate in accessible testing. Entering the process with a positive point of view could potentially allow for more flexibility and cooperation from all parties involved.

The Psycho-educational Assessment

Typically, IQ testing is a key part of school-based "psycho-educational assessment". The process and jargon of psycho-educational assessments can be overwhelming and confusing. However, there are two primary standards that parents can use to determine whether the assessments will be appropriate for their child. These are the standards against which all psycho-educational measurement can be evaluated:

- a) reliability - if the test is taken multiple times are the results roughly the same?
- b) validity - does the test measure what it is supposed to measure?

For the population of children with severe, multiple disabilities and the availability of today's assistive technology, a critical third standard is proposed - accessibility.

- c) accessibility – does the testing minimize the effects of physical or sensory impairments (e.g., inability to speak aloud, point, hear or see) on cognitive (thinking and learning) assessment?

The intended purpose of intelligence testing is to measure a person's cognitive abilities. However, current testing practices rely a great deal on a child's ability to perform the tests physically by pointing to, writing, or speaking a response to the test question. Using this kind of testing to estimate the cognitive abilities of a child with severe physical and speech impairments is like measuring the cognitive abilities of a visually impaired person by their ability to visually read a test question, or using an English language test to measure the IQ of someone who does not speak English. This standard should be kept in mind specifically as it relates to the standard of accessibility and should be discussed extensively with the evaluator. Parents should question whether or not the assessments will meet all three standards of reliability, validity and accessibility.

The purposes of psycho-educational assessments are to help establish strategies that will foster learning. An inappropriate cognitive assessment for students with severe physical or sensory impairments can result in an over- or under-evaluation of skills and abilities and ultimately lead to inadequate or harmful educational programs and poor transitions to adulthood (Sabbadini, Bonanni, Caresimo, Caltagiore, 2001). Parents' advocacy efforts will be most effective if they are informed, assertive, cooperative, and specifically emphasize the need for accessible testing procedures.

References

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