



## What is “Testing” and Who Does it?

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There are no tests for psychiatric disorders, at least not in the sense of tests that we are used to thinking about for physical diseases. There is not a single psychiatric disorder for which a blood test, x-ray, brain scan, biopsy, or visual exam can be confirmatory. That is not to say that we do not have “tests.” There are many different kinds of tests for a variety of reasons.

### **Why Are There No Diagnostic Tests?**

The brain is the most complicated organ ever created. It consists of three main structures (cerebrum, cerebellum, and brainstem), two hemispheres, four lobes in each hemisphere, more than 40 neurotransmitters, and, depending on how you count them, more than a dozen deep structures. It controls many emotional and behavioral functions including mood, perception, memory, executive function, thought, and emotional regulation. Direct examination of function is nearly impossible. Any understanding we have about problems of the mind requires flanking maneuvers to approach brain function from different angles with a variety of measures.

There are four main types of testing: (1) school / academic problems, (2) gifted, (3) disorders / routine clinic care, and (4) brain injury.

### **1. School / academic problems**

Testing for children who have been identified with learning and/or behavioral problems by teachers is usually called psychoeducational assessment. This is a battery of standardized tests, most of which are normed for the general population, to assess IQ, all academic areas (e.g., reading and math), verbal and nonverbal comprehension, and executive functions.

Other types of assessments are conducted for specific issues. For example, to test for autism, tests of sensory processing and autism-specific tests are used. To test for attention-deficit hyperactivity disorder (ADHD), computerized test of attention, teacher rating scales of attention, and executive function tests are used.

*Only psychologists (PhD or PsyD) are trained to administer and interpret this type of testing.*

### **2. Gifted**

Testing for gifted children can be thought of as a subset of psychoeducational assessments. This testing is often required by schools to determine if children meet the Louisiana Department of Education gifted program criteria to be considered for advanced programs or schools.

### **3. Disorders / routine clinic care**

Testing in routine clinic care means completing self-administered questionnaires. There are hundreds of these types of questionnaires for anxiety, depression, posttraumatic stress disorder, and others. Clinicians use these to get a more comprehensive picture of syndromes and it saves them time when meeting with patients. It is not quite accurate to call these tests, however. They are merely parts of an assessment, just like verbal history and physical exams are parts of assessments.

Most patients neither ask for nor seem to really want these types of tests. They talk about their problems, clinicians listen, and diagnoses are made almost entirely by verbal history. This process works well for most folks. Most clinicians do not use these types of tests. However, there is a growing movement towards measurement-based care based on the idea that assessments and treatment outcomes can be improved with more systematic tracking of data.

*Any type of clinician can use and interpret self-administered questionnaires.*

The notion of testing usually only comes up when diagnoses are unclear or treatments have been tried and do not work well. It is at this point where patients, or in the case of children and adolescents, parents, sometimes ask, “Can’t we go to the hospital for more testing?” Clinicians then must explain that there are no tests at the hospital or anywhere that we just have not thought about. In these situations, however, formal testing by psychologists may be helpful to clarify the nature of the problems. Psychologists can administer a battery of testing in a process that is very similar to psychoeducational testing but may add other types of standardized testing for personality and thought disorders.

### **4. Brain Injury**

Testing for individuals who have suffered brain injuries is usually called neuropsychological testing. This assessment battery overlaps with psychoeducational testing but includes tests for specific areas of brain injury that are not used in psychoeducational testing. The underlying idea is the same as psychoeducational testing in that a battery of standardized tests are used that are normed for the general population. Neuropsych testing however focuses more on memory, visuospatial skills, and perception. If possible, the psychologist will try to tailor the tests to the specific brain center or pathway that has been impacted.

*Specialized psychologists (PhD or PsyD), called neuropsychologists, are trained to administer and interpret this type of testing.*

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