

Why do Psychological Testing?

Correct Diagnosis + Correct Treatment = Progress

Psychological testing is helpful in understanding in a systematic way (based on well researched evaluation instruments) a person's intellectual, educational, and emotional functioning. It is often used in situations where it is difficult to determine the underpinnings of intellectual, educational, and/or emotional problems and challenges. While children and adolescents can at times tell you how they hurt, they often have difficulties pinpointing why they hurt and what is hurting. Adults in crisis also may struggle in terms of understanding the factors leading up to and contributing to the crisis situation. Psychological testing involves obtaining knowledge and understanding to identify specific treatment goals targeting the presenting problems.

BENEFITS OF PSYCHOLOGICAL TESTING

- In complex situations, it allows for the confusion to be understood and for a cogent treatment plan to be developed.
- It can help identify reasons why intellectual potential may not have been realized and demonstrated in the educational setting.
- If already involved in therapy, psychological testing can be used to determine progress and to chart additional areas needing to be addressed in order to obtain treatment goals.
- Comprehensive assessments can also offer valuable information to treating physicians with regard to present emotional status in consideration of medication regimes.
- It can help us understand the functions that are involved in intellectual thought, management of intellect, educational achievement, emotional problem solving, and regulation of feelings.
- Psychological testing can often identify subtle difference in the diagnostic presentation so that the right treatment is initiated.
- **When should testing be considered?**
 - Complex diagnostic questions (i.e., When there is an unclear diagnosis or concerns about a possibly developing diagnosis (e.g., mood, anxiety, eating disorder)
 - Difficulties that present in the school situation:
 - in a particular subject area
 - noncompliance with homework/class work regimes
 - difficulties concentrating
 - Underachievement
 - Suspicion of a learning disability
 - Difficult emotional behaviors that are hard to manage
 - Problems with emotional regulation
 - Problems with impulsivity, aggression, and behavioral dyscontrol
 - Problems getting along with others
 - When clarification of treatment goals is needed
 - When problems persist even with treatment

- **Comprehensive Psychological Testing provides answers to troubling questions.**

- Intellectual strengths and weaknesses
- Level of executive functioning skills
- Educational skills and presence of a learning disability
- Clarification of emotional difficulties
- Identification of underlying psychological concerns
- Assistance in treatment planning

Psychological testing also offers a formal way to measure traits, feelings, beliefs and abilities that can lead to people's problems. Some tests assess the presence of certain conditions, such as depression, anxiety, anger control or susceptibility to stress. Other tests measure general well being and provide an overall picture of a person's personality. A typical psychological assessment includes an interview with a mental health practitioner and one or more formal psychological tests. The person may be able to complete some tests on his own; others may be completed with an examiner.

Upon a referral for psychological testing, one should recognize that the intent is to gain a deeper, more complete understanding of the problem than can be gained from a brief office visit. Additional information is often needed before designing the best approach to address the problem.

Psychological testing can provide a rich perspective of an individual in a brief amount of time through the use of evidence-based instruments.

If a referral for testing is made, knowing why such a referral is being made is important to know. Becoming generally familiar with what to expect is also important. Often, an appointment for psychological testing requires several hours of time to complete questionnaires or engage in face-to-face paper and pencil testing.

Be an active consumer before, during and after psychological testing. To get started, ask any professional referring someone for a psychological assessment the following questions:

- Who will conduct the assessment?
- What is being measured?
- How long will testing take?
- What materials should the individual bring to the test? (e.g., glasses, other records)
- Who will have access to the results? (e.g., medical doctor, family, the court, teachers, research teams)
- How will the tests be taken? (e.g., verbal responses, paper and pencil, computer)

These are examples of only a few questions. It is important to ask any question that will increase comfort level with the test or testing procedure

How are the results of a psychological evaluation shared with the referring doctor or the

patient?

After an evaluation, the results are scored and interpreted and a formal report is usually written. This report is then sent to the referring professional (doctor/therapist). Some psychologists may also have a discussion with the referring professional to facilitate understanding of results. The referring professional usually decides if, and how, the results will be communicated to the patient. In some cases, the referring doctor will ask the psychologist who performed the evaluation to discuss the results with the patient in a feedback session. In all cases, the patient is entitled to an explanation of results in language that he can understand.

Neuropsychological Assessment

Just as the heart and lungs are critical in bringing oxygen to other internal organs, the brain is the key player in the nervous system. When disease affects the heart and lungs, the complex mechanisms that affect oxygen delivery break down, leading to damage in other organ systems. Similarly, when disease affects the brain, the functions normally controlled by the central nervous system, including *thinking, emotions and behavior*, begin to break down. Recent research has shown that many mental disorders, including disordered moods, anxiety, depression, schizophrenia, obsessive-compulsive disorder and certain personality disorders, as well as cognitive and behavioral impairments, may result from disturbances in brain functioning. As a result, techniques for evaluating brain function as it relates to these problems have gained wide use in the mental health field.

There are a number of ways to measure brain functioning. Imaging techniques like computed tomography (CT) or magnetic resonance imaging (MRI) scans look for structural abnormalities in the brain. Tests like an electroencephalogram (EEG) are designed to look for abnormalities in the electrical activity of the brain. Neuropsychological tests offer another alternative: in these tests, the brain is evaluated by putting it to work and measuring specific abilities like memory, language, perceptual ability, problem-solving and motor and sensory functions.

Neuropsychological tests involve paper/pencil and mechanical procedures, are painless, are not invasive and carry little if any risk to the patient. They normally involve direct, face-to-face work with a psychologist or her staff member. A comprehensive neuropsychological examination may take 6-8 hours and involves a broad range of tests and activities. A briefer, more selective evaluation may be performed, depending upon the individual case.

Neuropsychological tests are performed by psychologists and other mental health professionals who have specific educational and practical training. Not all psychologists are trained to perform neuropsychological tests, and it may be worthwhile to ensure that the assessing professional is properly trained to give and interpret neuropsychological tests. The clearest indication of proper training is board certification in clinical neuropsychology. When a referral is made, the professional or her staff should be contacted for specific instructions. Typically, the individual is encouraged to take customary medications, get a good night's rest

the night before, and to bring glasses or contacts if vision correction is needed.

Unlike MRI or EEG procedures, which follow relatively standardized protocols, there are a variety of approaches to neuropsychological assessment. The neuropsychological examination usually begins with a clinical interview to enable the psychologist to become more familiar with the client's problems and to elicit any signs and symptoms of psychiatric or neurological illnesses. After the interview is completed, formal testing begins. Some neuropsychologists perform this testing themselves, while others use trained neuropsychological technicians. Both approaches are appropriate, since it is the psychologist who will ultimately be responsible for interpreting these test results. Some professionals use a standard battery approach in which the same group of tests is given to all patients regardless of the presenting problem. The clearest example of this approach is the *Halstead-Reitan Neuropsychological Battery*. This battery consists of a number of validated tests of brain function. Other professionals use a *flexible battery* of tests that are selected based on the patient's specific problem. For example, an elderly patient with suspected Alzheimer's disease might get a slightly different group of tests than a young patient after a closed head injury. While the Halstead-Reitan is the most widely used fixed battery of tests, most neuropsychologists use some version of the flexible battery approach. In general, it is a good idea to inquire about the psychologist's general approach and how the tests will be used in making diagnostic decisions.

Although the content of individual neuropsychological evaluations may differ, the evaluation typically includes measures of intellectual functioning and some assessment of emotional/personality functioning. In addition, several domains of cognitive (thinking) ability are assessed:

1. **Memory:** The client will be asked to learn and remember new information (short stories, word lists, geometric designs and faces) and to recall them later. Ability to recall information learned in the past may also be assessed.
2. **Language:** Ability to name objects, comprehend and follow directions, speak, read, write and repeat may be assessed in different ways.
3. **Spatial and perceptual:** Ability to analyze visual designs, assemble puzzles or appreciate spatial relationships may be measured with specific tests.
4. **Attention and concentration:** Ability to pay attention for short or long periods of time may be assessed using tests of mental arithmetic, speeded writing or other abilities. Ability to concentrate while distracted may also be assessed through tests requiring one to perform two tasks at once.
5. **Problem-solving:** Real-life or abstract problems to solve will be given. How these problems are analyzed and solved may be evaluated.
6. **Motor and sensory abilities.** One may be asked to perform some tasks in which fine motor coordination is assessed or to respond quickly to sensory input. Many neuropsychological examinations also contain measures that are designed to ensure that the patient is putting forth her best effort in performing the tasks.

Neuropsychological tests can be quite useful in defining cognitive and behavioral strengths and weaknesses as well as in diagnosis of specific medical conditions. If the results are abnormal, this does not necessarily mean that the person is cognitively impaired. Various emotional conditions (depression, anxiety, confusion and mental dullness) can impair

neuropsychological test performance. Because of this, the neuropsychologist takes into account all reasonable explanations of the profile in interpreting the results. In most cases, the results will also lead to specific recommendations for treatment or management of the patient's problems.

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