



Neuropsychological Evaluation Overview

Introduction

A neuropsychological evaluation is an integral component when evaluating the effects of brain dysfunction and is one of the methods of diagnosing neurodegenerative, neurodevelopmental, and acquired disorders of brain function. A neuropsychological evaluation is composed of valid and reliable tests designed to evaluate the cognitive functions, as well as mood and personality. A thorough evaluation also includes a clinical interview with the client, and the client's family if available, and a review of medical records and related collateral information. The length of a neuropsychological evaluation can vary drastically depending on the referral questions.

Neuropsychology

Neuropsychology is a branch of psychology focusing on the relationship between brain function and behavior. A clinical neuropsychologist has specialized training in the cognitive bases of behavior, behavioral neurology, central nervous system anatomy and physiology, human learning, and psychometrics. This extensive knowledge of human behavior and brain function is used to interpret the results of the neuropsychological tests, and to provide treatment recommendations related to central nervous system function and behavior disorders. In addition, the neuropsychologist can assist a treatment team in the development and monitoring of cognitive, behavioral, and adjustment related problems. Lastly, neuropsychologists often provide education to clients, caregivers, and treatment team members regarding the cognitive, social, and emotional consequences of brain dysfunction.

Neuropsychological Testing

Before testing, Dr. Pachet meets with the client for a clinical interview. The spouse or parents are also interviewed if available. The clinical interview includes orientation testing and the gathering of relevant personal and background information such as the cause of the brain dysfunction, the physical, cognitive, and emotional effects of the dysfunction, the person's occupation, scholastic strengths and weaknesses, medical history, and future goals. Following the clinical interview and review of medical records, Dr. Pachet determines which tests to administer. A neuropsychological evaluation involves testing that is sensitive to problems in brain functioning. Unlike CT or MRI scans, which shows what the structure of the brain looks like, neuropsychological testing examines how well the brain is working when it performs certain functions (i.e., remembering). The tests chosen for the evaluation attempt to assess the cognitive and behavioral issues that are paramount to each client. The tests are not invasive and they do not involve attaching you to machines or using X-rays. Most of the tests involve questions and answers, or working with materials on a table. Some tests may use a computer. The testing may be conducted by Dr. Pachet or by a trained assistant. To ensure optimal performance, the individual's attention span and level of fatigue often dictate the length of the testing sessions. A comprehensive neuropsychological evaluation can take six to eight hours to complete. While some clients will complete the entire assessment in one day, it is very common to complete the evaluation across two or three sessions.



A neuropsychological evaluation is a comprehensive analysis of brain functioning and the extent of cognitive impairment. This in-depth assessment examines new learning and memory, attention and concentration, information processing, visual spatial abilities, motor speed and dexterity, perceptual abilities, language skills, mood, personality, insight and awareness, and executive functions. Executive functions include mental flexibility, decision-making skills, and the ability to plan, organize, and generate solutions to complex problems. A comprehensive neuropsychological evaluation generates a profile of the individual's cognitive strengths and weaknesses, and attempts to delineate how brain dysfunction has affected the person's ability to function in the community, in the workplace, and in the home. After of evaluation is completed Dr. Pachet may schedule an appointment to go over the results with the client, and with permission of the referral source, Dr. Pachet may send the results to your family physician.

Applications of a Neuropsychological Evaluation

A neuropsychological evaluation may be of assistance in identifying possible problems with brain functioning, forming a diagnosis, and documenting changes in cognitive functioning over time. A neuropsychological evaluation is also useful in guiding treatment for personal, education, or vocational needs. A neuropsychological evaluation is used in rehabilitation settings to develop rehabilitation goals and compensatory strategies based on the cognitive strengths of the client. This evaluation is also useful in addressing specific referral questions such as the client's ability to return to work, need for supervised living arrangements, the cognitive effects of medications, decision-making capacity (i.e., the need for an alternate decision-maker such as a guardian or trustee), testamentary capacity, and the ability of a person to write / amend documents such as a Personal Directive and Enduring Power of Attorney.

Following the completion of a neuropsychological evaluation, Dr. Pachet can make specific treatment recommendations. Compensatory memory aids, cognitive retraining, and behavior modification are examples of recommendations Dr. Pachet may make. These strategies attempt to use the person's cognitive strengths to mediate the effects of cognitive weaknesses. Compensatory memory aids include day timers or journals that allow the patient to schedule upcoming appointments, and to keep a list of emergency contacts and important personal information. Cognitive retraining programs include paper and pencil workbooks or computer programs that focus on strengthening areas of weakness like attention or abstract thinking. Behavior modification programs attempt to address behavioral problems such as low frustration tolerance or socially inappropriate behavior that may be disruptive in rehabilitation settings or in the community.

For additional information regarding the neuropsychological services offered by Dr. Pachet, please go to www.pachetservices.com or call 403-232-1212.