Neuropsychiatry and behavioral neurology are clinical disciplines devoted to understanding and treating behavioral disturbances associated with brain dysfunction. Detection and characterization of brain disorders require a careful clinical assessment as well as the application of selected neurodiagnostic procedures. Neuropsychiatry, neuropsychology, and behavioral neurology: A critical comparison. Neuropsychiatry, Neuropsychology, and Behavioral Neurology. October 1995. Handbook of Neuropsychology and Aging. The Twenty-Sixth Annual Meeting of the International Neuropsychological Society. Neuropsychiatry, Neuropsychology, and Behavioral Neurology: A Critical Comparison. Psychosis in Basal Ganglia Disorders. Back to Top. Neuropsychology is a branch of psychology that is concerned with how the brain and the rest of the nervous system influence a person's cognition and behaviors. More importantly, professionals in this branch of psychology often focus on how injuries or illnesses of the brain affect cognitive functions and behaviors. It is both an experimental and clinical field of psychology that aims to understand how behavior and cognition are influenced by brain functioning and is concerned with the diagnosis and treatment of behavioral and cognitive effects of neurological disorders. It thus shares concepts and concerns with neuropsychiatry and with behavioral neurology in general. The term neuropsychology has been applied to lesion studies in humans and animals.