

## A Brief Note on Neuropsychology

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### Commentary Article

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### DESCRIPTION

The field of neuropsychology is a subset of psychology. It is concerned with how the brain and the rest of the nervous system interact with a person's cognition and behaviour. This discipline of psychology is generally concerned with how brain injuries or disorders affect cognitive and behavioural functioning. It is a clinical and experimental branch of psychology that aims to understand how brain function influences behaviour and cognition, as well as the diagnosis and treatment of behavioural and cognitive impacts of neurological illnesses.

### INTRODUCTION

Neuropsychology tries to understand how the brain links with the mind through the study of neurological patients, whereas classical neurology concentrates on nervous system dysfunction and classical psychology is generally separated from it. As a result, it has a lot in common with neuropsychiatry and behavioral neurology in general in terms of concepts and concerns. Lesion research in humans and animals has been referred to as neuropsychology. It has also been used in some investigations to capture electrical activity from individual cells (or groups of cells) in higher primates.

Experimental neuropsychology is a method of studying the link between the neurological system and cognitive function that employs methods from experimental psychology. Although a handful of researchers may do animal studies, the majority of their work includes studying healthy humans in a laboratory setting. There are various types of neuropsychology.

Neuropsychological testing and assessment, care, and rehabilitation of patients who have had a neurocognitive issue as a result of disease or damage (especially to the brain). They contribute a psychological perspective to

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treatment, in particular. Clinical neuropsychology is the application of neuropsychological knowledge to the evaluation (see how psychological aspects impact and are affected by illness and damage). They can also determine whether a person's issues are caused by brain pathology, emotional or other (possibly) changeable causes, or both. A test can reveal that both patients X and Y are unable to name items they have been exposed to in the preceding 20 minutes (showing potential dementia). If patient Y can name some of them after being prompted (e.g., by being told that the item they couldn't name is a fruit), this provides for a more precise diagnosis than merely dementia (Y appears to have the vascular type which is due to brain pathology but is usually at least somewhat reversible). Clinical neuropsychologists work in interdisciplinary medical teams in hospitals; some work in private practice and may provide expert testimony in medico-legal cases.

Cognitive neuropsychology is a relatively recent field that has arisen as a synthesis of experimental and clinical neuropsychology's complementing techniques. It studies people who have had a brain injury or have a neurological ailment in order to the better understanding of the mind and brain. Functional localization is a paradigm of neuropsychological functioning. This is predicated on the idea that if a specific cognitive impairment is discovered following an injury to a certain area of the brain, that portion of the brain may be involved in some manner. However, there's reason to suspect that the connection between mental activities and brain regions isn't as straightforward as it appears. Parallel processing, for example, is an alternate model of the mind-brain connection that may have more explanatory capacity for the human brain's workings and dysfunction. Another method looks at how the pattern of errors made by brain-damaged people can limit our knowledge of mental representations and processes without taking into account the underlying neural anatomy. Cognitive neuropsychiatry is a more contemporary but related method that aims to understand the normal operation of the mind and brain by examining psychiatric or mental disease.