

Introduction to Neuropsychology

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Description

Neuropsychology combines elements of neurology and psychology. Neuropsychologists study the effects of mental illness on the nervous system (including the brain and spine). They also know how brain chemistry changes caused by injuries, hormones, or environmental factors affect mental health.

History of neuropsychology

For thousands of years, people have known that the brain affects the mental state. As early as 3500 BC, the Egyptian priest Imhotep began to study the influence of the brain on behavior. Hippocrates believed that the brain directly affects behavior. The philosopher René Descartes was fascinated by how ideas emerge from the brain. He was criticized for using very unscientific methods. Despite this, he took many animal sections to understand how the brain and bodywork. Neuropsychology appeared in the second half of the 19th century. With the development of brain research in the 20th century, scientists began to realize that certain parts of the brain control certain body functions. We also now know that chemicals such as neurotransmitters and hormones affect the way signals are transmitted to other parts of the body, including the inside of the brain. This has provided a powerful window for neuroscientists to understand how the brain works, and this awareness gave birth to modern neuropsychology.

Neuropsychology in therapy

For centuries, mental health professionals have had to study the brain, even if they can't see the organ they are treating. Although the brain is still a mystery in many respects and neuropsychology is still a young field, it provides therapists with a better understanding of how the brain works and ways to integrate medical and psychological elements. Therapists who use neuropsychological components employ various techniques and often combine findings in the field with other methods. Some are trained by doctors or neurologists; others are mainly therapists.

Neuropsychology mainly involves evaluating conditions that affect brain health, such as Alzheimer's disease and traumatic brain injury, and evaluate how nerve function affects mental health. Clinical neuropsychologists perform psychometric assessments to measure the health of the nervous system. You can also check brain scans, see a doctor, and rely on laboratory tests to diagnose and treat brain diseases. A treatment method called neurofeedback is a real-time observation of brain activity. The therapist provides feedback to the client on how to improve or change brain activity for mental health. Some neuropsychologists also treat learning disabilities, such as dyslexia.

Neuropsychology has a strong experimental tradition. Many neuropsychologists use trial and error methods and make small changes to test their effectiveness. For example, a therapist who relies on neuropsychology may recommend a specific drug before making other changes. If the medication does not work well, the therapist can add lifestyle changes and other medication or, if it does not work at all, he may eliminate the medication.

Conclusion

Neuropsychology has influenced many therapeutic traditions. A typical response pattern of humans is negative prejudice—that is, our brain focuses on negative events and feelings. Just like our ancestors, to survive, we tend to focus on things that we think are a threat to our happiness rather than positive experiences. Neuropsychology shows that we can change these patterns, whether they are inherited from us, genetic traits or evolutionary traits, or based on our personal life experiences. Many therapists incorporate this philosophy into their treatment methods.

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