



## Effects of Biological Psychology and its Assumptions

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### Description

Biological psychology, also known as biopsychology or psychobiology, is the scientific study of the biological and physiological processes that underlie human behavior, thoughts, and emotions. It is an interdisciplinary field that focuses from various disciplines such as neuroscience, genetics, anatomy, physiology, and psychology to understand the brain and the nervous system influence behavior and mental processes. The study of biological psychology began in the 19th century when scientists began to investigate the relationship between the brain and behavior.

Early studies focused on the effects of brain damage on behavior and mental processes. However, it was not until the mid-20th century that biological psychology received international recognition as well as acceptance. One of the fundamental principles of biological psychology is that behavior and mental processes are influenced by physiological processes in the body, particularly those involve in the nervous system. The nervous system is responsible for transmitting signals throughout the body, which allows perceiving environment, interacting with others, and making decisions. The brain is the central processing unit of the nervous system and it is responsible for coordinating and regulating all bodily functions.

The study of cognitive neuroscience seeks to understand how the brain and the nervous system work, how they develop, and they influence behavior and mental processes. This includes investigating

the effects of various biological factors such as genetics, hormones, neurotransmitters, and brain structure and function on behavior and mental processes. The role of genetics in behavior and mental processes is an essential field of research in biological psychology. Genetics refers to the study of traits are passed down from one generation to the next through DNA. Researchers have identified numerous genes that are associated with various behavioral and mental processes, including personality traits, cognitive abilities, and psychiatric disorders.

Another area of study in biological psychology is the role of hormones in behavior and mental processes. Hormones are chemical messengers that are produced by the endocrine system and play a vital role in regulating bodily functions such as metabolism, growth, and reproduction. They also play a key role in regulating mood and behavior. For example, Cortisol, a stress hormone, is released and it has a significant impact on mood and cognitive function. Neurotransmitters are another essential area of study in biological psychology. Neurotransmitters are chemicals that are produced by neurons and responsible for transmitting signals throughout the nervous system.

### Assumptions of biological psychology

As a result, all psychological has a biological explanation. All thoughts, emotional responses, and behaviors have a genetic component.

In three different ways, a biological perspective is important for the study of psychology:

**Comparative method:** Different species of animals can be examined and compared. This can assist in the effort to understand human behavior.

**Physiology:** The nervous system and hormone levels perform, the brain functions, how changes in structure and function can affect behavior. For example, humans may evaluate the recommended opioid drugs behavioral control or through their interactions with the nervous system.

**Investigation of inheritance:** Animal inherits from its parents, inheritance mechanisms (genetics). For example, humans may require recognizing if high intelligence is transferred on from one generation to the next generation.

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