

Biological psychology assignment

[Psychology](#)



Abstract Biology psychology is the study of how the structure, evolution, growth, and chemistry of living things control, define and affect human behavior. Biopsychology includes neuropsychology (your actual brain functioning and structure); and also the effects of hormones, drugs, diet etc on human behavior and cognition. It is reductionist, very scientific and objective, and assumes all people are very similar (share universal mechanisms). Yes it uses animals sometimes – but usually in brain scans, drugs tests etc. just studying animal behavior compared to humans is comparative psychology. Biopsychology may also include such separate areas as neuropsychology, and evolutionary psychology. Also known as biopsychology and psychobiology. A great deal of experiments have been done in the area on non-human species only, such as rats and monkeys. As a result, the critical assumption in biopsychology is that organisms share biological and behavioural similarities. Biopsychology also has similarities to neuropsychology which relies heavily on the study of behavior of humans with nervous system dysfunction.

Biopsychology deals with mental processes and behaviours that are shared, such as, sensation, perception, control of movement, emotion and learning and memory. Biological Psychology Biological psychology or neuropsychology applies the physiological principles to the study of behavior and psychological principles to the field of medicine (Schultz & Schultz, 2004). The idea that the mind and body work in unison and that this unison should be used in medical and psychological treatments physical dates back to the times and work of Hippocrates, Avicenna, Paracelsus and Galen.

Each of these early practitioners saw man as the combination of interactions between the mind and body. They recognized the need to identify illness and disease as a result of this connection. To treat the entire individual and reach the goal of optimal health, not just the state of being illness free the mind and body must be treated (Rice, 1986). Paracelsus set the standard for European medicine with his views of biological psychology and medicine. Paracelsus viewed illness and physical disorders as weakness within the mind and spirit (Rice, 1986).

He believed in the mind-body connection to such an extent that he challenged other clinicians to reach inside and find the spiritual guidance and insight to effectively heal and treat impaired individuals. Hippocrates also believed that healing required a spiritual/mind approach and a physical/body approach to be effective (Rice, 1986). The Island of Coz, the birthplace of Hippocrates and where he was raised, is reported to have special healing powers, a curative vibration, with the healing powers extending beyond the Earth's soil and the surrounding atmosphere (Rice, 1986).

This was the mind/body health treatment of Hippocrates' time. Shamanism is thought to be the oldest basis for biopsychology dating back 20, 000-30, 000 years ago (Rice, 1986). The Shaman are respected, spiritual leaders even in today's times. Their healing practices may be found in the alternative treatments of today. Descartes was the first mental health professional to incorporate the mind body approach to mental health and medicine (Schultz ; Schultz, 2004).

The fundamental question basing the controversy was “ Are mind and body- the mental world and the material world ??? distinct from each other” or do they operate in tandem with the soul or spirit and body working together for health (Schultz ; Schultz, 2004)? Descartes’ life and work focused on the mechanistic conception of the body, the theory of reflex action, the mind-body interaction, the localization of mental functions within the brain (the beginnings of neuropsychology), and the doctrine of innate ideas (Schultz & Schultz, 2004).

The doctrine of innate ideas follows the biological psychology foundation. This doctrine shows the mind as responsible for 2 types of processes. First derived ideas come from the application of external stimulus or are the product of experiences of the senses. An example would be a tension headache caused by the stimulus of noise. Innate ideas are created within the mind without outside influences. For example an individual who uses self talk is effecting change without a stimulus to do so.

Another example would be monks who participate in meditation have been show to significantly reduce their metabolism, an involuntary function of the body (Cromie, 2002). The field of biological psychology is comprised of experts in the areas of anatomy, anthropology, behavioral medicine, biochemistry, clinical neuropsychology, endocrinology, genetics, molecular biology, paleontology, psychiatry, psychophysiology, and many more. to name but a few. Working together, these professionals study the structural and functional aspects of behavior across species, explore the developmental processes of biology and behavior across the life span, and utilize findings to formulate practical applications that promote human

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health” (Rosenzweig, et al, 2001). Biological psychology is closely related to biopsychology, comparative psychology, behavioral neuroscience, physiological psychology, evolutionary psychology, evolutionary biology, neurobiology, neuropsychology, and health psychology.

All of these fields have some basis in the mind-body connection.

Neuropsychology is the study of human behavior and the nervous system. The synaptic explanation for ADHD has its roots in neuropsychology. The biopsychology is founded in the fields of behavioral and biomedical science with knowledge and techniques that are important to health and illness and the application of the knowledge and the techniques related to prevention, diagnosis, treatment and rehabilitation (Schultz & Schultz, 2004).

Did Hippocrates know that his birthplace would be the symbol of a new area of study or did he just enjoy its spa like features? References Cromie, W. (2002). Meditation: Changes temperatures: Mind controls body in extreme experiments. Harvard University Gazette. Retrieved on June 21, 2010 from <http://www.news.harvard.edu/gazette/2002/04.18/09-tummo.html> Rice, R. D. (1986). The mind-body spirit connection: Ancient and modern healing strategies for a traumatic birth and the sick newborn. *Pre-and Peri-Natal Psychology Journal*, 1(1).

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