Chapter 1
Biopsychology: An Introduction

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ABSTRACT
The study of biopsychology seeks to describe the physiological mechanisms of the body that mediate our movement and mental activity. Biopsychology focuses on biological basis of behavior (i.e., how brain and other biological processes affect psychological behaviors). Biopsychology is also known as biological psychology or psychobiology. Biopsychology is the application of the principles of biology to the study of mental processes and behavior that is the study of psychology in terms of bodily mechanisms.

CHAPTER OUTLINE

- The origins of biopsychology
- Nature and scope of biological psychology
- Mind-body interactions
- Biopsychological research methods

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INTRODUCTION

The study of biopsychology seeks to describe the physiological mechanisms of the body that mediate our movement and mental activity. Biopsychology focuses on biological basis of behavior i.e. how brain and other biological processes affect psychological behaviors. Biopsychology is also known as biological psychology or psychobiology. Biopsychology is the application of the principles of biology to the study of mental processes and behavior that is the study of psychology in terms of bodily mechanisms. The view that psychological processes have biological (or physiological) correlates is the basic assumption of the whole field of biological psychology. Through a variety of research methods, psychologists in this field hope to uncover information that enriches human understanding of their own mental processes, as well as providing valuable data that enable those in medical fields to better treat patients with a variety of disorders, both physical and mental. Biopsychology has been a prominent field of psychology from the start in Europe and North America and remains a major area of research and instruction in many countries. In the last two centuries, biopsychology has found new ways to answer old questions, has tackled important new questions, and has abandoned some problems as poorly defined. Carefully designed behavioral experiments and innovative biomedical techniques have been essential to its progress.

NATURE OF BIOPSYCHOLOGY

Biopsychology is the study of how emotions, thoughts and behavior are affected by the brain, the nervous system and neurotransmitters in human and non-human animals. Biological psychology, behavioral neuroscience, psychobiology, and physiological psychology are another term often used synonymously with biological psychology. In order to understand something it is important to know the history and have a definition. Biological psychology has been dated to Avicenna (980-1037 C.E.), a physician who recognized physiological psychology in the treatment of illnesses and linked the physical and psychological together. Behavioral neuroscience, also known as biological psychology (Breedlove, Rosenzweig & Watson, 2007). Pinel (2003) defines Biopsychology (also known as psychobiology, behavioral biology, behavioural neurosciences) as “the scientific study of the biology of behavior”. Carlson (2005) calls it the physiology of behavior where the brain and physiological correlates and modulators of behavior are the domain of study.
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