## Psychology approaches



The biological approach to studying the behavior and mental process of humans has been in existence for several decades beginning with the neurological changes in psychiatry studied by Sigmund Freud, the use of drugs that alleviated psychological symptoms to the current revolution in genetics and molecular biology (Barondes). According to the biological approach behavior is controlled by the activities that take place in the nervous system and the electrochemical processes which take place between the neurons in the brain determine the way people talk, act and think (Sammons). In addition the recent development in the field of genetics and molecular biology has enabled psychologists to have a better understanding about human behavioral and mental processes (Barondes). Though the biological approach was initially shunned by scientists such as Freud who invented the psychoanalytical approach the numerous advances made in the field of biology has contributed immensely towards the understanding of human psychology. There has also been a greater understanding of the mechanism of drug action for psychiatry treatment due to these biological advances and as a result drugs are being used effectively to cure mental illnesses. The advances made in genetic study of psychiatric disorders have enabled researchers to identify the causes for these illnesses, especially those with no observable neuropathological conditions, and the study of the molecular biology of the receptors will help in development of more effective drugs for psychological disorders. In the two most prevalent psychiatric disorders, schizophrenia and manic-depressive disorder, genetics has been found to play a very prominent role and with the new DNA mapping techniques it has been possible to identify the hereditary genes (Barondes; Sammons). Inheritance of these faulty genes in turn influences the nervous

system thereby giving rise of the symptoms of the disorder (Sammons). The study of behavior of an individual can also be facilitated using genetic approaches which can provide better insights to human temperament and nature. Apart from aiding the development of pharmacotherapy, the study of the molecular biology of the receptors will also help in mapping the brain of an individual which in turn can aid in the understanding of human behavior (Barondes). Biopsychologists consider the chemical changes occurring in the brain to be the major cause that controls the behavior of an individual. Chemicals such as neurotransmitters facilitate communication between the neurons and the intensity of these signals in turn causes varaiations in speaking, thinking and action (Sammons). In addition, identification of specific neurobiological components that are responsible for psychological symptoms such as stress and anxiety through molecular techniques can help in devising better treatment strategies (Barondes). Research has also shown that changed levels of sex hormones such as testosterone or oxytocin influences the general behavior of humans. Other biological techniques that have been useful in studying the functioning of the brain include scanning techniques such as PET and MRI. Additionally the nervous system can also be studied in details using other mammals as scientists consider their nervous system to be similar to humans. Thus the methods used in the biological approach have been associated with a larger degree of reliability and credibility as the method relies more on objective observations and not merely on subjective experiences (Sammons). Despite the objections and misconceptions associated with the biological approach that include use of animal models to study human behavior, excluding the influence of social, cultural and environmental factors on behavior, the biological approach has

made important contributions which have laid the foundations to understanding humans. The basis of several psychological disorders and use of drugs for treatment of mental illnesses have been explained by this approach which has helped millions of people cope with the illness (Sammons). Reference 1. Barondes, Samuel H. " The Biological Approach to Psychiatry: History and Prospects." The Journal of Neuroscience, (1990), 10(6): 1707-1710. 2. Sammons, Aldan. " The Biological Approach: the basics." Approaches to Psychology. Psychlotron. org. uk, (n. d). Web. 30 June 2011. http://www.psychlotron. org.

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