

# Biological and humanistic approaches to personality

[Science](#), [Genetics](#)



Biological and Humanistic Approaches to Personality PSY250 As research into personality progressed, scientists began to look beyond psychoanalysis and trait theories for other explanations into how personality develops. They started to look at the biological factors that influence personality formation (Hans Eysenck, Jeffrey Gray, Sir Francis Galton (genetic study of twins)), the effect of growth needs on personality formation (Abraham Maslow), and the basic aspects of the humanistic personality theory and how it compares to the biological explanation of personality formation (Eric Fromm, Carl Rogers, Abraham Maslow). These topics will be considered in more detail in the following discussion. Although environment plays a part in personality, genes also make significant contributions. Some genetic disorders, such as Angelman or Williams syndrome are characterized by excessive happiness and friendliness. Biological aspects of a person's temperament, such as introversion/extroversion, actively, and impulsively, also help shape the personality. Studies of identical twins have shown that twins separated at birth and raised in different environments still share many personality traits. Therefore, we are not simply blank slates totally influenced by what our environment writes on us. Responses to certain environmental stimuli seem to be hard-wired into our nervous system and endocrine systems. Electroencephalograms (EEG) have shown that, at a very basic level, extroverts show less arousal to stimulation than introverts do. Hans Eysenck theorized that because of this low level of arousal, extroverts seek out stimulating circumstances while introverts, who may be receiving too much stimulation from the environment, try to "get away from it all" by shying away from stimulating environments. Differences in activation of the brain's

hemispheres may also effect personality formation. Greater activation of the right hemisphere, which is believed to have a role in negative emotions, may cause over reaction to negative stimuli. On the other hand, higher activation of the left hemisphere, thought to play a role in positive emotions, could result in more powerful reactions to positive stimuli. Jeffrey Gray proposed the idea that our nervous systems may be responsible for influencing whether we are more motivated by punishment or reward. Disruption in the function of neurotransmitters like dopamine and serotonin can also effect personality. Will Sheldon expanded on Ernest Kretschmer's ideas that body type might be connected to certain mental disorders and applied them to the general population. Sheldon developed three body types and associated personality characteristics: mesomorphs — muscular, large-boned; athletic, ectomorphs — slender; studious, and endomorphs — roly-poly; good-natured. Sheldon's ideas were too simplistic, but it might be possible that certain biological factors could affect both personality and body type. Social influences may affect body type, which may in turn affect how others react. Both aspects can influence personality development. " A stable personality depends on a healthy, well-functional brain" ( was this supposed to be cited)

Certain diseases and disorders can change can change or destroy one's personality. Strokes damage part of the brain and can cause a dramatic change in personality. Pick's disease also causes deterioration of the brain. It may cause a marked change in in a person's beliefs or preferences.

Alzheimer's disease, as the disease becomes advanced, seems to result in total loss of personality. Postpartum depression is triggered by a biological process. Severe, untreated symptoms may include hallucinations, delusions,

and persistent disturbing thoughts of suicide, being possessed, or harming the infant. Environmental toxins, such as mercury, and both legal and illegal drugs, including Valium, Prozac, cocaine, and heroin, can result in biological changes to the body that may temporarily or permanently alter personality.