## Hormones and heredity essay

Literature, Russian Literature



Human behavior has always been fascinating to many people. Scientists have long studied the factors that cause and contribute too many different types of human behaviors. The Effects Heredity Has On Human Behavior Many different traits are passed along to people through genetics. Some of these traits include the basics such as eye color, height, and weight. Heredity also affects human behavior as well.

Behavior genetics focuses on the extent to which heredity accounts for individual differences in behavior and thinking (Psychology: An Introduction, Twelfth Edition, by Charles G. Morris and Albert A. Maisto. Published by Prentice-Hall, 2005. ). Scientists use many different types of studies to examine animal behavior. By doing this, scientists are able to compare their findings to human behaviors.

Two of the methods that are used include strain studies and selection studies. Both of these methods can not be used on humans so scientists have found various ways to study human behaviors. The first method is by doing family studies, this helps to learn if genes truly influence traits. The only flaw in this study is that though family members do share the same genes, they also share the same environment.

Therefore family studies alone cannot clearly distinguish the effects of heredity and environment (Plomin, DeFries, & McClearn, 1990). Scientists also use twin studies to distinguish the effects of heredity and the environment. This method is helpful because both people share the same genetic makeup and any differences between them would have to be due to the environment. Another method used is adoption studies. This type of

study is used to determine if the adoptees behavior is different in a different household. One thing interesting to note is that adoption tudies provide additional evidence for the heritability of intelligence, some forms of mental illness (Horn, 1983; Scarr & Weinberg, 1983), and in behavior thought to be solely determined by environmental influences, even smoking (Boomsma, Koopmans, Van Doornen, & Orlebeke et al.

, 1994; Heath & Martin, 1993; Lerman et al. , 1999). Evolutionary Psychology Though behavior geneticists try to explain differences in human behavior, evolutionary psychologists explain the commonalities. Evolutionary psychologists believe the key to this is the process of evolution by natural selection. Natural selection is also known as the Darwin Theory, a survival of the fittest so to speak. Organisms that are best adapted to their environments are most likely to survive and reproduce, according to this theory. Evolutionary psychologists study the origins of behaviors and mental processes, emphasizing the adaptive or survival value of traits. In the evolutionary psychology world there are many different ideas and critics within their own group.

The Effects of Hormones on Human Behavior The endocrine system is made up of endocrine glands produce hormones. Hormones re chemical substances that are released into the bloodstream. Hormones guide processes such as metabolism, growth, and sexual development. Hormones can activate behaviors such as alertness, excitability, sexual behavior, concentration, aggressiveness, and reactions to stress.

The thyroid gland secretes a hormone called thyroxin. Thyroxin can cause different affects on a person when it is over or under active. Parathyroid's are four tiny pea shaped organs located within the thyroid gland that secrete parathormone. This controls and balances the level of calcium and phosphate in the blood and tissue fluids.

The pituitary gland is a complex gland that plays an important role in body growth. It also produces the largest number of different hormones, which has a wide range of effects on the functions of the human body. The pituitary gland is often called the "master gland" because it plays an influential role in regulating other endocrine glands. The gonads, which are the testes in men and the ovaries in women, secrete androgens. These androgens are linked to sexual behavior and also sexual interest. The last glands to mention are above the kidneys. These are called the adrenal glands. These glands produce several important hormones such as epinephrine.

Epinephrine activates the sympathetic nervous system and norepinephrine.

These raise the blood pressure and trigger the release of ACTH prolonging the body's response to stress. Hormones are a vital part of human behavior. If there are imbalances of hormones in the body it can lead to many different behaviors. Hormones imbalances can affect mood, aggression, concentration and reactions to stress.

These reactions can cause negative effects on not only the person, but the relationships they have with others as well.