

Nature vs. Nurture-The Battle Continues?

Young boys' aggression, little girls' manners-are these behaviors based on environmental factors or behaviors based on genetics? No matter how the controversial issue of nature versus nurture is argued the results are constant; as Matt Ridley Matt Ridley (2003) states, "human behavior has to be explained by both nature and nurture." Because the arguments for both sides are relevant and relate to one another it is logical to state that both nature and nurture help to determine who we are. It was once said by Shinichi Suzuki, a teacher, that, "The destiny of children lies in the hands of the parents." (Audiblekox, 2006). Suzuki sums it up with her statement because the parents are ideally responsible for both the genetics and the environment provided.

When considering nature, it is important to accept research based from an evolutionary view. For example, if Darwin's theory of evolution is considered factual, then it is plausible to believe that humans are comparable to other creatures such as apes, guinea pigs, and even rats. Scientific research has shown that these animals have behavioral traits that are genetic, or passed on from generation to generation (Ridley, 2003). An example of animals showing inherited behavior traits would be in an experiment studying the aggression in mice. This characteristic was found to be passed through each generation. If the suggested research, explored by Sarah Hrdy, applies to humans, then it is possible to believe that the mice's ability to nurture their offspring is instinctive, or better known as genetically programmed (Hrdy, 1999). This is clear evidence that genetics, is evident in all species, including humans.

Many scientists have researched twins in order to obtain information about genetics and its correlation to behavior. Overall, twin studies have found almost everything to be equally strongly heritable (Ridley, 2003). Personality plays an impressive role on each individual, due to its formation by both genetics and the environment in which raised. The five major personality factors include: openness, conscientiousness, extroversion, agreeableness, and neuroticism. The combination is typically known by scientists as O.C.E.A.N. (Ridley, 2003). These characteristics are important because they all help mold the personality which is important in society as it determines behavior.

The most impressive component of the genetic aspect is its flexibility. Some impressive traits were revealed when working with twins. The different types of variations showed that nearly forty percent of personality variations were due to genetics. Less than ten percent of twins were influenced by their environmental factors and twenty-five percent were primarily influenced by unique environmental influences, such as accidents. While the margin of error is about twenty-five percent, the statistics point towards a genetic connection (Ridley, 2003).

Synapses in the brain provide clear evidence that nature has a significant role in behavior. According to LeDoux (1998), “synapses are the connection points between brain cells that allow the cells to communicate with each other. Synapses are responsible for much of the brain’s activity. (These) are the keys to who that person is.” The important key in tying nature and nurture together take place within the brain when synapses are created. This occurs in the brain because it is a system that is run due to genetics, but the bonds are formed by life experiences. Synaptic plasticity is an

experience, which occurs in the environment, and that shape the synapses formed. Plasticity is the brain's ability to retain information and complete thought processes. It also refers to the amount of information contained. Most of synapses are formed during early childhood, and continue to develop throughout life through memory and learning experiences (LeDoux). Considering that the majority of synapses are formed during early childhood, it is important to reflect on what type of environment the child is typically in.

The most vulnerable time for synapses to be formed is from birth and into the early years of childhood. Most children's experiences in that time frame are with parents. The children are influenced by discussion, directions, and their parent's actions (LeDoux). Later in life, when children become adults, they often hear themselves repeat phrases once used by their own parents. It is not that either nature or nurture is more powerful; the human brain was simply built for nurture (Ridley, 2003). Genetics controls the brain functioning, but the environment helps define the experiences.

Because synapses are formed primarily during early childhood and throughout life, scientists such as Matt Ridley, are devoted to a blank slate theory. They believe that all human behaviors are products of the social environment alone (Ridley, 2003). Prominent social scientists primarily declare the slate to be blank, as they dislike the ideas of instinct and evolution (Pinker, 2002). Steven Pinker (2002) declared that, "even when a behavior is heritable, an individual's behavior is still a product of development." The blank slate is also in reference to having no prior knowledge. In this instance, humans rely on nurture to account and the experiences found to define one's own person.

Some scientists agree with cultural existences, but only with the assumption that it affects the sexes differently. This argument has a lack of supporting evidence as it assumes that all sexes are treated equally. Through historical events it can be proven that male and female sexes have not been treated equally (Roberts, 2006.) Society has also given males and females particular behavior patterns to follow. These behaviors consist of girls playing with dolls and being worried about their appearance while boys behaviors include rough play and athletics.

Even a verse in the Bible suggests that the nurture theory is what molds behavior. In Proverbs 22:6 it is stated “Train the child in the way he should go, and when he is old he will not turn from it.” (Audiblox, 2006). Examples of feral children helps to support that some human behaviors must be learned in the environment. The story of Amala and Kamala, young girls raised in the wilderness by wolves, help to demonstrate that the nurture received played a significant role in their social training. The two young girls appeared and behaved wolf-like. They had long, matted hair, walked on all fours, ate raw meat, and ate in a crouched position. This example helps provide evidence as to the importance of being nurtured. While some behaviors are innate, such as breathing and reflexes, not all behaviors are genetically passed along (Audiblox, 2006).

Humans are not outside the reach of evolutionary change. If humans fail to evolve at a rate in which allows survival, then the concept of natural selection will weed out the less adapted. Humans with stronger genes will adapt to the changes and pass along a genetic code which will strengthen the next generation. As Darwin once stated, “What a trifling difference must often determine which shall survive, and which will perish. Eggs or young animals seem to generally suffer most”(Hrdy, 1999).

Is it fair to sway towards one side or the other of the debate? Logically, the debate is invalid. A child born into a family automatically inherits the parent's genes. Even if certain genes were not passed along to the child, they would be raised in an environment which supports that specific gene.. Assuming the child is born with the genes, the environment in which they are raised will simply reinforce the behaviors. Not only are the parents influencing the child, but society is also molding the child into what is "socially appropriate."

Although the topic seems controversial, it appears to be almost too focused on each individual side. Both sides have relevant, strong arguments, and the topic seems as if it will be in constant dispute. Scientists should look at the argument from Ridley's perspective. He sums up his perspective when he states, "Nature does not prevail over nurture; they do not compete; they are not rivals; it is not nature versus nurture at all." Nature and nurture work together to help create the behavior patterns in humans, Nature via Nurture (Ridley, 2003).