The Age Old Debate of Nature vs. Nurture

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The nature versus nurture debate is one of the oldest philosophical issues within psychology. So what exactly is it all about?

Nature refers to all of the genes and hereditary factors that influence who we are—from our physical appearance to our personality characteristics.

Nurture refers to all the environmental variables that impact who we are, including our early childhood experiences, how we were raised, our social relationships, and our surrounding culture.

Even today, different branches of psychology often take a one versus the other approach. For example, biological psychology tends to stress the importance of genetics and biological influences. <u>Behaviorism</u>, on the other hand, focuses on the impact that the environment has on behavior.

In the past, debates over the relative contributions of nature versus nurture often took a very one-sided approach, with one side arguing that nature played the most important role and the other side suggesting that it was nurture that was the most significant. Today, most experts recognize that both factors play a critical role. Not only that, they also realize that nature and nurture interact in important ways all throughout life.

A Closer Look at the Nature vs. Nurture Debate

Do genetic or environmental factors have a greater influence on your behavior? Do inherited traits or life experiences play a greater role in shaping your personality? The nature versus nurture debate is one of the oldest issues in psychology. The debate centers on the relative contributions of genetic inheritance and environmental factors to human development.

Some philosophers such as Plato and Descartes suggested that certain things are inborn, or that they occur naturally regardless of environmental influences. Nativists take the position that all or most behaviors and characteristics are the results of inheritance.

Advocates of this point of view believe that all of our characteristics and behaviors are the result of evolution. Genetic traits handed down from parents influence the individual differences that make each person unique.

Other well-known thinkers such as John Locke believed in what is known as *tabula rasa*, which suggests that the mind begins as a <u>blank slate</u>. According to this notion, everything that we are and all of our knowledge is determined by our experience.

Empiricists take the position that all or most behaviors and characteristics result from learning. Behaviorism is a good example of a theory rooted in empiricism. The behaviorists believe that all actions and behaviors are the results of conditioning. Theorists such as John B.

<u>Watson</u> believed that people could be trained to do and become anything, regardless of their genetic background.

Examples of Nature vs. Nurture

For example, when a person achieves tremendous academic success, did they do so because they are genetically predisposed to be successful or is it a result of an enriched environment? If a man abuses his wife and kids, is it because he was born with violent tendencies or is it something he learned by observing his own parent's behavior?

A few examples of biologically determined characteristics (nature) include certain genetic diseases, eye color, hair color, and skin color. Other things like life expectancy and height have a strong biological component, but they are also influenced by environmental factors and lifestyle.

An example of a nativist theory within psychology is Chomsky's concept of a language acquisition device (or LAD). According to this theory, all children are born with an instinctive mental capacity that allows them to both learn and produce language.

Some characteristics are tied to environmental influences. How a person behaves can be linked to influences such as <u>parenting styles</u> and learned experiences. For example, a child might <u>learn through observation</u> and reinforcement to say 'please' and 'thank you.' Another child might learn to behave aggressively by observing older children engage in violent behavior on the playground.

One example of an empiricist theory within psychology is Albert Bandura's <u>social learning theory</u>. According to the theory, people learn by observing the behavior of others. In his famous <u>Bobo doll experiment</u>, Bandura demonstrated that children could learn aggressive behaviors simply by observing another person acting aggressively.

Even today, research in psychology often tends to emphasize one influence over the other. In <u>biopsychology</u>, for example, researchers conduct studies exploring how <u>neurotransmitters</u> influence behavior, which emphasizes the nature side of the debate. In <u>social psychology</u>, researchers might conduct studies looking at how things such as peer pressure and social media influence behaviors, stressing the importance of nurture.

How Nature and Nurture Interact

What researchers do know is that the interaction between heredity and environment is often the most important factor of all. Kevin Davies of PBS's *Nova* described <u>one fascinating</u> <u>example</u> of this phenomenon.

Perfect pitch is the ability to detect the pitch of a musical tone without any reference. Researchers have found that this ability tends to run in families and believe that it might be tied to a single gene. However, they've also discovered that possessing the gene alone is not enough to develop this ability. Instead, musical training during early childhood is necessary to allow this inherited ability to manifest itself.

Height is another example of a trait that is influenced by nature and nurture interaction. A child might come from a family where everyone is tall, and he may have inherited these genes for height. However, if he grows up in a deprived environment where he does not receive proper nourishment, he might never attain the height he might have had he grown up in a healthier environment.

Contemporary Views of Nature vs. Nurture

Throughout the <u>history of psychology</u>, however, this debate has continued to stir up controversy. Eugenics, for example, was a movement heavily influenced by the nativist approach. Psychologist Francis Galton, a cousin of the naturalist Charles Darwin, coined both the terms *nature versus nurture* and *eugenics* and believed that intelligence was the result of genetics. Galton believed that intelligent individuals should be encouraged to marry and have many children, while less intelligent individuals should be discouraged from reproducing.

Today, the majority of experts believe that both nature and nurture influence behavior and development. However, the issue still rages on in many areas such as in the debate on the origins of homosexuality and influences on intelligence. While few people take the extreme nativist or radical empiricist approach, researchers and experts still debate the degree to which biology and environment influence behavior.

Increasingly, people are beginning to realize that asking how much heredity or environment influence a particular trait is not the right approach. The reality is that there is not a simple way to disentangle the multitude of forces that exist. These influences include genetic factors that interact with one another, environmental factors that interact such as social experiences and overall culture, as well as how both hereditary and environmental influences intermingle. Instead, many researchers today are interested in seeing how genes modulate environmental influences and vice versa.

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