

The Nature versus Nurture Debate

Kristina Day

Stenberg College

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For centuries humans have been asking themselves, “is my destiny preset, or do I have control over it?” This question dates back hundreds of years to the early Greeks where a king named Oedipus was one of the first people to write literature on free will versus the nature of fate. (Lewis, 2000) This century old debate was published in 1871 using the phrase “Nature versus Nurture” by Charles Darwin’s cousin, Sir Francis Galton. (Lewis, 2000) Galton was an English scientist who started the debate between environmentalists and hereditarians while significantly contributing to both psychology and genetics. (“Nature vs Nurture,” n.d.) Galton started to study variations in human intelligence and was convinced a person’s success was passed down through heredity; this interest led him to study the different contributions from nature versus nurture in biological and identical twins. (“Nature vs Nurture,” n.d.) This essay will focus on the nature vs nurture debate, and the extent that an individual’s intellectual level is determined by their genes (nature), or their environment (nurture).

The nature versus nurture debate has created a century long controversy with many hypotheses but no clear conclusion. Overwhelming evidence has shown to prove both sides of the debate contribute to the characteristics of an individual. Nature states that genetics give us inborn traits and abilities while nurture states we learn these abilities as we mature. (“Nature vs Nurture,” n.d.) With so much proof and exposure for both sides of the debate you would think everyone would agree on the dual contributions between our genes and our environment, however scientist still argue over how much of each trait or ability is determined by a person’s genes versus their environment. (“Nature vs Nurture,” n.d.) Nature and nurture both shape our experiences; together they help our acquired flexibility in response to reproduction and survival. (Myers, 2013, p. 140) Today psychologists believe the debate is more focused on how genes and

environment influence the mind and whether it makes sense to split them into separate components. (Ploeger, 2008, p. 7) The human mind is made up of specialized content specific mechanisms that are the basis for human culture; these include an individual's behaviors, language and artifacts. (Ploeger, 2008, p. 7) Humans create their own environment based on their evolved genetics, social surroundings and nativism. Mainstream psychology does not believe in splitting up the two components of genes and environment because of the specialized content mechanisms and other factors involved around an individual's components. (Ploeger, 2008, p. 8)

The nature side of the debate used identical twins, fraternal twins and twins separated at birth running different studies to prove how genes influence personality. One study by the University of Minnesota found identical twins that were separated 37 days after birth. Tests done to measure personality, intelligence, heart rate and brain waves of the now 38 year olds showed almost identical results. (Myers, 2013, p. 133) The hereditarians' view of the nature versus nurture debate is based on an individual's intellectual level being pre-determined by their genes (nature). This means that an individual's mental ability is based solely on their genetics and that environment has nothing to do with determining a person's intelligence level. ("Nature vs Nurture," n.d.) Psychologist support the nature debate because its sides with fact such as biological traits. An individual's genetically determined traits such as eye color, blood type and personality to an extent are all due to hereditary. Genes can also help detect a person's predisposition to certain illnesses such as Alzheimer's, proving the direct effect that nature has on an individual's development. The nature debate confirms that genetic factors are responsible for an individual's personality, and appearance. (Myers, 2013, p. 131)

The nurture side of the debate uses different environmental factors such as parents, peers, culture and experience to prove that environment shapes an individual. A study on violent versus

non-violent video games reported by NBC, (2013) showed that the violent games enhanced emotions in the individual's amygdale (the brains center for fear and aggression). This emotional effect in the brain showed up in teenagers with normally non-violent behaviors when playing the violent games, proving that environment can affect an individual's personality. ("NBC," 2013)

Every individual comes from a different, background, environment and religion. An in-depth examination of an individual's surroundings will show how their intellectual level is determined by their environment (nurture). (Myers, 2013, Chapter 4) Specific environmental factors such as diet, nutrition, stress, media, and peer pressure all contribute to an individual's upbringing and influence their development. Despite an individual's genetic coding, a child's parents and other adults they are subjected to at a young age play a bigger part than genes in their development. Parents do matter when it comes to a child's nurture. Neglected children become neglectful, abused children become abusive, and the loved but disciplined child becomes confident and socially competent. (Myers, 2013, p. 147) Peers also influence an individual's development, preschoolers who dislike certain foods will eat that food if the other children around them are eating it, and teenagers that have friends who smoke typically will start smoking. Human nurture can be subjected to multiple factors that can influence people differently even if they come from the same genetic background. Nurture ultimately overshadows nature because there is more influence on an individual's development from environmental factors over genes. (Myers, 2013, p. 147)

Historians have referred to this debate as "Nature versus Nurture" since Sir Francis Galton first used the phrase in 1871, however most scientist of the 21st century believe that nature and nurture work together to combine a complex mixture of human behaviors and development. (Lewis, 2000) This debate seems like one that will always be challenged although

most people don't believe there will ever be one right answer. There are so many situations and different conditions that factor in both nature and nurture in an individual's development, giving reason to support both sides as reliable sources. Overall an individual's genes and biological traits enable them to adapt and learn from their surroundings, while their experiences and environment help shape their development.

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