

Since over 200,000 years ago, modern day humans have made large evolutionary advances toward civilization. This could not be done without the development of each individual. But what is it that constitutes our development? Developmental psychology¹ is a scientific study that allows us to answer this question. It is the study of how and why human beings change over the course of their life, by researching human's physical, cognitive, and social development. Since the 19th century a major argument in this field has been whether human development is determined by the environment or a person's genetics. This is called the "Nature versus Nurture" debate. This debate has been approached primarily in two different ways. The "nature" argues capability is inborn, and "nurture" argues it can be acquired through experience. This paper examines how nurture is more influential than nature in determining one's life. The case for nurture invalidates justifications for inequalities in society, emphasizing society's need to nurture the underprivileged.

Are we all born with the same natural qualities? There are some qualities that we all have, such as enduring the survival of our species. Natural inborn human qualities are viewed as hardwired into our genetics or hormone-based. Innate behaviors in humans do not have to be learned. An example of this is reflex behaviors, which are seen mostly in children. When babies feed they do it instinctively to increase their chances of surviving². But besides basic life functions, what makes one human is hard to scientifically define. We have a lot of characteristics that make us different, which are recognized as personality traits. In the field of psychology, there are five higher-order and widely accepted personality traits; neuroticism, extraversion, openness, agreeableness, and conscientiousness³. Some consider humans are born with a variety of characteristics which form a human nature⁴. These characteristics include ways of thinking, feeling, and acting. Human nature is loosely defined, because it is difficult to determine which of these traits are in fact natural. In the 1980s, Anthropologist Donald Brown surveyed hundreds of anthropological studies from around the world, and collected a set of human natures.⁵ He identified approximately 150 such features, coming to the conclusion that there is indeed a "universal human nature". This argues that we are born naturally equal. However, it is hard to determine the extent to which these universals are biologically inherited behavior or if they are cultural. Despite similarities in human behavior there are also many differences. The behaviorist believes that the knowledge learned from experiences determines our behavior. In other words, behaviorism assumes "all behaviors are either reflexes produced by a response to certain stimuli in the environment, or a consequence of that individual's history"⁶. Which argues that differences are caused by an individual's contact with certain environments. So does the environment determine us? Or are we all born equal from the start? In the debate between nature and nurture,

¹"Developmental Psychology". *En.Wikipedia.Org*, 2017, https://en.wikipedia.org/wiki/Developmental_psychology. Accessed 3 Dec 2019.

²Foundation, CK-12. "Innate Behavior". *CK-12 Foundation*, 2019, <https://www.ck12.org/biology/innate-behavior/lesson/Innate-Behavior-of-Animals-BIO/>. Accessed 3 Dec 2019.

³"New Global Study Defines 4 Personality Types— From Self-Centered To Role Model". *Hackernoon.Com*, 2018, <https://hackernoon.com/new-global-study-defines-4-personality-types-from-self-centered-to-role-model-4850fdbff073>. Accessed 3 Dec 2019.

⁴"Human Nature". *En.Wikipedia.Org*, 2019, https://en.wikipedia.org/wiki/Human_nature. Accessed 3 Dec 2019.

⁵"Cultural Universal". *En.M.Wikipedia.Org*, 2018, https://en.m.wikipedia.org/wiki/Cultural_universal. Accessed 3 Dec 2019.

⁶"Behaviorism". *En.Wikipedia.Org*, 2019, <https://en.wikipedia.org/wiki/Behaviorism>. Accessed 3 Dec 2019.

one does not exist without the other. Recent research suggests that there is a complex interaction between natural factors and environmental factors which determine human behavior⁷.

To illustrate this interaction nature and nurture have on the development of an organism, we can use two seeds of genetically identical corn. One is placed in a temperate climate and one in an arid climate. Both seeds are shaped from the start to grow because their biology is programmed to do so. And while the average height of the two corn stalks may be genetically determined to be equal, the one in the arid climate only grows to half the height of the one in the temperate climate⁸. This is due to lack of water and nutrients in its environment. Nurture became the dominating factor in influencing the seeds success.

Similar studies are conducted on humans through the Twin Studies⁹. The studies are conducted on identical or fraternal twins to reveal the importance of “nature and nurture”. Identical twins share essentially 100% of their genes, therefore “most differences between the twins ..(such as susceptibility to boredom, intelligence, depression, etc.) are due to experiences that one twin has but not the other twin”. Genetics play a large role as well, many traits being hereditary. Modern twin studies have concluded that “almost all traits are in part influenced by genetic differences, with some characteristics showing a stronger influence (e.g. height), others an intermediate level (e.g. personality traits) and some more complex heritabilities”. The result of twin studies has been that the interaction between heritable traits and experience determine an individual's life. However one can also be more influential than the other. The twin studies indicate that “physical traits are least affected by environment, ability and achievement scores more, and personality and temperament most”¹⁰. The twin studies help us identify that the environment is arguably the leading cause for variation in character and behavior. Environment is a strong influencer of one’s ability, because it may nurture or permit certain behaviors.

The corn study and the twin study have similar conclusions. In the corn study, both seeds contained the information necessary to function. They were both influenced by genetic factors. But only one survived because of it’s nurturing environment. Humans are born with similar potentials, primarily similar cognitive and physical characteristics. For twins, they share almost identical genetics. But factors that are determined by the environment such as social characteristics have the potential to govern a person's life. This was argued by Erik Erikson, who studied the psychological development of human beings. He wrote of an epigenetic principle defining this development. Epigenetics studies the changes that affect gene activity and expression¹¹. Many of these results from environmental factors, such as stress, nutrition, and health. Erikson’s theory stated that “we develop through an unfolding of our personality in predetermined stages, and that our environment and surrounding culture influence how we progress through these stages. This biological unfolding in relation to our socio-cultural settings is done in stages of psychosocial development, where progress through each stage is in part

⁷"Human Nature". *Encyclopedia Britannica*, 2019, <https://www.britannica.com/topic/human-nature>. Accessed 3 Dec 2019.

⁸"Genetics". *En.M.Wikipedia.Org*, 2019, https://en.m.wikipedia.org/wiki/Genetics#Nature_and_nurture. Accessed 3 Dec 2019.

⁹"Twin Study". *En.M.Wikipedia.Org*, 2019, https://en.m.wikipedia.org/wiki/Twin_study. Accessed 3 Dec 2019.

¹⁰"Psycnet". *Psycnet.Apa.Org*, 2019, <https://psycnet.apa.org/record/1937-04406-000>. Accessed 3 Dec 2019.

¹¹"Epigenetics". *En.Wikipedia.Org*, 2019, https://en.wikipedia.org/wiki/Epigenetics#Developmental_psychology. Accessed 3 Dec 2019.

determined by our success, or lack of success, in all the previous stages.”¹² He entails that we have the ability to develop, but the way we do so depends on the environment. We may have a faster or better developmental process if the environment is more nurturing.

How does the environment affect us on a biological scale? When we are children, we are at a vulnerable stage in our development. The environment we come in contact with is mostly the household we live in. We are developing social skills, which depend on the process by which we learn to interact with others around us¹³ such as parents and family members. Stimuli from these interactions is received by neurons, which send messages to other cells in the brain. These transmissions are known as synapses. As children, the brain creates more synapses than it needs. The synapses that are used a lot are strengthened and become a permanent part of the brain, those not used frequently are eliminated. This explains why what children come in contact with at an early stage forms the foundation of their development. In a study¹⁴ conducted by Urie Bronfenbrenner, the exchange of energy between the developing child and the persons and objects in their close settings is examined in terms of how it affects their development. His research concludes that “the more regular and positive these household interactions are, the better the child will perform academically and the less likely they will be to internalize problems”. It is important that children are provided with positive experiences so their biological development is nurtured. However, some households are more nurturing than others, which creates differences among children's development.

Factors in a child's development can also expand beyond the household to larger social environments. And the variation in how nurturing these social environments are create inequalities. There are many societal influences that affect one's socioeconomic status. This status affects the way someone lives by ways of education, health, income, location, and more. The more nurturing these variables are to the individual, the easier the development. Location for example, which is largely determined by someone's economic status, affects development. Studies show that “residing in a low poverty neighborhood apply additional risk to health beyond other effects”. And this exists nationwide due to systems such as redlining. Redlining is the “systematic denial of various services to residents of specific, often racially associated, neighborhoods or communities¹⁵” Redlining creates separate neighborhoods and denies them resources to develop and succeed. It is the result of discrimination based on ethnic and cultural groups in specific locations. This discrimination extends beyond areas of living, so when children grow up, they are still confronted with inequity. Inequalities also exist within schools and employment. Those with lower education may have a harder time finding employment, or have a lower income. Those same individuals may have worse health outcomes because they are not given the resources to prevent or care for them. They are not enabled to buy healthy,

¹²"Psychosocial Theory | Lifespan Development". *Courses.Lumenlearning.Com*, 2019, <https://courses.lumenlearning.com/wm-lifespandevelopment/chapter/erikson-and-psychosocial-theory/>. Accessed 3 Dec 2019.

¹³VA, SCAN. "Social Development In Children | SCAN". *Scanva.Org*, 2019, <https://www.scanva.org/support-for-parents/parent-resource-center-2/social-development-in-children/>. Accessed 3 Dec 2019.

¹⁴"Epigenetics". *En.M.Wikipedia.Org*, 2019, https://en.m.wikipedia.org/wiki/Epigenetics#Developmental_psychology. Accessed 3 Dec 2019.

¹⁵"Redlining". *En.Wikipedia.Org*, 2019, https://en.wikipedia.org/wiki/Redlining#Legislative_action. Accessed 3 Dec 2019.

available foods which prevent illnesses¹⁶. The relationship between these variables of income, employment, health, and location is dynamic and reciprocal. Families become trapped in this cycle of poverty¹⁷ due to limited or no resources. This oppression extends hereditarily through social reproduction¹⁸, and the cycle is difficult to escape.

When having to work harder for similar successes, due to inescapable factors, an individual's mental health is also challenged. These factors can cause an individual to be less physically capable of handling stress and heavy workloads than someone born into a wealthier environment. A recent study has shown the connection between childhood poverty and self harm. The research showed that "children who remained in the top 20 percent of the wealthiest families over their first 15 years of life were the least likely to harm themselves or commit violent crime between the ages of 15 and 33. While those from families who remained in the least affluent fifth of society were seven times more likely to harm themselves and 13 times more likely to commit violent crimes as young adults."¹⁹ Those residing in poverty result to self harm and crime due to the negligence of their environment. A study conducted by Researchers at the University of Manchester had similar conclusions. The results found that "exposure to poverty can have an adverse impact on early child development as well as parental conflict and separation, harming children's psychosocial development and well-being²⁰." This same study found that the amount of poor sleep among African-American executives is associated with "discrimination or microaggressions experienced in the workplace...or greater levels of neighborhood and home stress²¹." Individuals with background in poverty and prejudice experience more stress. They are challenged to maintain health and safety. As a result, they are more susceptible to harming themselves or others.

Many people are living in poverty by virtue of their socioeconomic inequalities, which exists due to segregations on many factors of identity. This includes religion, kinship, race, ethnicity, gender, age, sexual orientation, class, and more. When approaching inequality from a "nature" rather than "nurture" perspective, one could argue that those who do not have higher education or income haven't worked for it. They don't acquire the reason or motivation to do so. Or from their disposition they are not qualified. The elites believe that they are successful entirely on the basis of merit. It may also be argued that inequalities exist today due to theories such as natural selection. Perhaps humans with favorable traits are more likely to reproduce and

¹⁶*Usatoday.Com*, 2019,

<https://www.usatoday.com/story/sponsor-story/blue-cross-blue-shield-association/2018/10/24/these-top-10-health-conditions-affecting-americans/1674894002/>. Accessed 3 Dec 2019.

¹⁷"Cycle Of Poverty". *En.Wikipedia.Org*, 2015, https://en.wikipedia.org/wiki/Cycle_of_poverty. Accessed 3 Dec 2019.

¹⁸"Social Reproduction | Encyclopedia.Com". *Encyclopedia.Com*, 2019,

<https://www.encyclopedia.com/social-sciences/encyclopedias-almanacs-transcripts-and-maps/social-reproduction>. Accessed 3 Dec 2019.

¹⁹"Study Links Childhood Poverty To Violent Crime And Self-Harm". *Child In The City*, 2018,

<https://www.childinthecity.org/2018/11/02/study-links-childhood-poverty-to-violent-crime-and-self-harm/?gdpr=accpt>. Accessed 3 Dec 2019.

²⁰"Children In Poor Families Seven Times More Likely To Harm Themselves, Finds Study". *The Independent*, 2018, <https://www.independent.co.uk/news/uk/home-news/poverty-poor-children-self-harm-families-uk-violence-study-a8576366.html>. Accessed 3 Dec 2019.

²¹Hamblin, James. "The Paradox Of Effort". *The Atlantic*, 2015,

<https://www.theatlantic.com/health/archive/2015/07/the-health-cost-of-upward-mobility/398486/>. Accessed 3 Dec 2019.

thrive. This could also be known as “survival of the fittest”. To argue in this way that people are where they are due to natural circumstances serves as a justification for inequalities. Society does not exist the way it does because people are born “differently”. People are born into the differences that society creates and perpetuates. An individual's socioeconomic status overcomes factors of nature and is a product of how nurtured someone is. This status ultimately affects one's development.

Knowing this, what can we do as a society to end inequalities? We should globally shift our way of thinking about inequality and poverty. We should recognize that no human is born inferior to another. We should be born free and equal in dignity and rights. This is not happening today. People are considered to be secondary to another based on factors of identity, which influences the way they are able to navigate the world. We should not deny any rights due to factors of identity. The underprivileged should be nurtured in these basic human rights of income, education, health care, freedom of speech, political representation, and participation. Systems should be put in place to do so, and old systems that fashion inequalities should be broken down. As individuals, we should not use “natural” as an excuse for problems. And instead, be conscious of the affect different types of nurture has on people so we can take the initiative.

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