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Research Writing 2018

2/25/2019

People can acquire altruistic personality after birth.

Can you give your kidney to a stranger that you have never met and may never meet?

Why do you decide not to donate your kidney even though there are over 100,000 people on the waiting list for a kidney transplant in the U.S.? According to Health Resources and Services Administration (HRSA), there were nearly 6,900 living donors and more than 10,700 deceased donors in the U.S. in 2018. So what factors divide people into those people such as donors and those who are not? The recent study shows the difference of people who have altruistic personality and who are not so is related to the size of amygdala. According to the study "Neural Mechanisms of Social Decision-Making in the Primate Amygdala", people who have true altruistic personality, such as people who have given one of their own kidneys to a complete stranger, have amygdala which is larger than average by about eight percent, and psychopaths' amygdala is smaller than average by about 18 or 20 percent (Chang et al., 2015). Does this result mean people cannot get altruistic personality after birth because it is just related to the size of amygdala and our personalities are largely out of our control? This paper clarifies that people can acquire altruistic personality after birth by explaining that

experience and education interact with our genes information to make basic human personality and that wealth and mindset are really important to change human personality throughout life.

Genetics is certainly important, but many studies also demonstrate that our upbringing interacts with our genetic blueprints to shape who we are. The debate “Are basic personality traits caused by genes or environment?” is one of the oldest philosophical issues within psychology. However, today, most experts recognize that both factors play a critical role. Besides, they realize that nature and nurture interact in important ways throughout life because many examples of traits that are influenced by nature and nurture interaction were found in the scientific experiment (Cherry and Gans, 2018). One of them is perfect pitch. Even though many people believe that this ability tends to run in families and it might be tied to a single gene, researchers have found that possessing the gene alone is not enough to develop this ability and musical training during early childhood is necessary to allow this inherited ability to manifest itself (Athos, 2007). Height is the other example of traits that are influenced by nature and nurture interaction. Even though a child was born from a family where everyone is tall, and he may have inherited these genes for height, 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.

Moreover, a recent survey shows that nurture affects not only abilities but also basic personality. According to the survey that observed genes and attitudes of more than 7000 pairs of identical twins, big five personality traits are also influenced by nature and nurture interaction (Ando, 2017). Big five personality traits are composed of openness to experience, conscientiousness, extraversion, agreeableness and neuroticism, and they are regarded as the most important factors to form human personality. The result showed extraversion, neuroticism, conscientiousness, agreeableness, openness to experience, in turn, 46%, 46%, 52%, 36%, 52% were influenced by genetic factors and the rest were influenced environmental factors. From the results of this survey, it can be seen that 35% to 55% of the personality is formed by inheritance, and 45% to 65% is formed by the postnatal environment and education.

Furthermore, from the genetic viewpoint, it has been proved that human attitude and personality are affected by the environment even though they have the same genes. This function is called “epigenetics.” Epigenetics is a modification to regulate each genes activity without changing the sequence by adding chemical compounds to single genes. As the process, even though the DNA sequence is the same, the genes are modified to control gene expression depending on the nurture, and it differs each person’s personality and attitude. One of the examples of epigenetics is DNA methylation. It occurs when hydrogen attaches cytosine that is one of DNA’s four bases turns to the methyl group, and it inactivates the

function of specific genes (Razin and Riggs, 1980). There are still many mysterious things in epigenetics, but many biologists believe that this epigenetics work can change basic human personality throughout life. From these surveys about human abilities, identical twins and epigenetics, it is clear that people's personalities are influenced by both nature and nurture, and nurture factors can affect it about 35% to 55% impact by some factors such as epigenetics.

Thus, what factors are related to changing our personality to be more altruistic? One of the important things is wealth and improvement living standard. Abigail Marsh, an associate professor of psychology department of Georgetown University, said "As societies become wealthier and better off, people seem to turn their focus of attention outward, and as a result, all kinds of altruism towards strangers increases, from volunteering to charitable donations and even altruistic kidney donations" (2016).

This phenomenon is also explained by Maslow's hierarchy of needs. This theory explains the stages of the behavioral motivation of humans and, he said, "there is giving oneself to something beyond oneself as a further dimension of motivation" (1971). Maslow used the terms "physiological," "safety," "social needs," "esteem," and "self-actualization" to describe the pattern through which human motivations generally move. This means that people have to satisfy every five motivation at first so that they acquire altruistic motivation.

Based on these studies, it is clear that to get altruistic personality, wealth and improvement of living standards are really important, and minimum wealth to satisfy lower motivations, such as safety, social needs, and so on, is necessary.

The other factor that makes people get altruistic personality is changing their mindset. Broad traits might be stable through life, but some experts, including psychologist Carol Dweck, suggests that it is our "in-between" qualities such as beliefs and belief systems, that lie under the surface of the broad traits that are the most important in making us who we are (2016). Dweck suggests in her research that these things are controlled by changing your habitats. Actually, psychologists already have found that the relationship between habits and human personality. For example, sporting people scored lower on social inadequacy and higher on self-esteem. Further, individuals who do not have a daily breakfast were more self-sufficient. Snacking individuals were generally less rigid and less dominant, but more hostile (Lemos-Giráldez, 1990).

Abigail Marsh in her research also found the other evidence that mindset is important. She found that altruists usually do not think of themselves as being at the center of anything, as being better or more inherently important than anybody else. When she asked one altruist why donating her kidney made sense to her, the kidney donor said, "Because it is not about me." Another said, "I am not different. I am not unique. Your study here is going to find out that I am just the same as you." Abigail concluded that it is what really distinguishes

extraordinary altruists from the average person that thinking there is no center of your circle, there can be no inner rings or outer rings, nobody who is more or less worthy of your care and compassion than anybody else (2016).

The other example of mindset affects the personality is “meme.” Meme is an idea, behavior or style passed from one individual to another within a culture, such as doctrine, fashion, habits, and music (Dawkins, 1976). The feature of meme is that it does not obey your gene. As the example, asceticism is completely formed by meme because this thought does not provide any profit to genes that aim to breed. Therefore, meme such as religion or culture can change people’s mindset and behavior regardless of the genetic function of DNA.

Considering these studies, even if it is not easy to get the altruistic mindset, such as thinking there is no center of your circle, mindset is really important to get altruistic and adopting good habits or meme are helpful to promote changing our mindset.

As the conclusion, this paper argues that people can acquire altruistic personality after they are born by some factors throughout their lives. The first reason is that some surveys show nurture such as environment or education, has 45% to 65% effect on human personality and it can be explained by epigenetics. The second reason is that wealth is really connected to human altruistic personality. The final reason is that “In-between” qualities are important in making a human personality, and people can change these things by changing habits. From these reasons, even if personality change might not be easy, and changing some broad traits

might never be possible, it is a mixture of the two forces nature and nurture that ultimately shape human personality based on some researches. Especially, wealth and mindset have really impact on shaping who we are throughout life, and the mindset can be controlled by yourself with habits or meme to get altruistic personality. Therefore, people can acquire altruistic personality throughout their lives by some factors.

Works-Cited

- Athos, E. A., et al. "Dichotomy and Perceptual Distortions in Absolute Pitch Ability." *Proceedings of the National Academy of Sciences of the United States of America*, vol. 104, no. 37, 2007, pp. 14795-14800.
- Ando, Juko. 行動の遺伝学 – ふたご研究のエビデンスから [Genetics of Behavior: From Evidence of Twin Studies]. *Japanese journal of physiological anthropology*, vol. 22, no. 2, 2017, pp. 107-112.
- Chang, Steve W. C., et al. "Neural Mechanisms of Social Decision-Making in the Primate Amygdala." *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 52, 2015, pp. 16012-16017.
- Cherry, Kendra, and Steven Gans. "The Age Old Debate of Nature vs. Nurture." *Verywell Mind*, Kendra Cherry, 21 Nov. 2018, www.verywellmind.com/what-is-mature-versus-nurture-2795392
- Dawkins, Clinton Richard. *The Selfish Gene*. Oxford University Press, 2016.
- Dweck, Carol. "What Having a 'Growth Mindset' Actually Means." *Harvard Business Review*, 13 Jan. 2016, hbr.org/2016/01/what-having-a-growth-mindset-actually-means.
- Lemos-Giráldez, SerafinAngel. "Personality Dispositions and Health-related Habits and Attitudes: a Cross-sectional Study." *European Journal of*

Personality 11:3, 1990, pp. 197-209.

March, Abigail. "Why some people are more altruistic than others" TED, Oct.

2016, www.ted.com/talks/abigail_marshall_why_some_people_are_more_altruistic_than_others

Maslow, Abraham H. *Motivation and Personality*. Harper & Row, New York, 1970.

Organ Transplants in United States Set Sixth Consecutive Record in 2018. Health Resources and Services Administration, 7 Jan. 2019, optn.transplant.hrsa.gov/news/organ-transplants-in-united-states-set-sixth-consecutive-record-in-2018/.

Razin, Aharon, and Arthur D. Riggs. "DNA Methylation and Gene Function." *Science*, vol. 210, no. 4470, 1980, pp. 604-610.