

The role of genes in nurturing and shaping identity.

Jizzakh State Pedagogical University Faculty Of Natural Sciences Department Of
"Biology And Methods Of Its Teaching"

Teacher Ortiqova Mokhira

3rd Year Student Shonazarova Jasmina

E-mail shonazarova.jasmina02@gmail.com Tel: +998939856888

Abstract: The scientific article examines the role of genes in the upbringing and formation of personality. The research work of Robert Plomin is analyzed. The twin method. The foster parent method. The influence of genes on human behavior and personality formation.

Keywords: gene, personality, Robert Plomin, Robert M. Sapolsky, twin method, foster parent method.

Аннотация: В научной статье рассматривается роль генов в воспитании и формировании личности. Анализируется исследовательская работа Роберта Пломин. Близнецовый метод. Метод приёмных родителей. Влияния генов на поведение человека и формирования личности.

Ключевые слова: ген, личность, Роберт Пломин, Роберт М.Сапольски, близнецовый метод, метод приёмных родителей.

Annotatsiya: Ilmiy maqolada genlarning roli ko'rib chiqiladi shaxsni tarbiyalash va shakllantirish. Robert Plominning tadqiqot ishlari tahlil qilinadi. Egizak usul. Farzand asrab oluvchi ota-onalar usuli. Genlarning inson xatti-harakatlariga ta'siri va shaxsiyatning shakllanishi.

Kalit so'zlar: gen, shaxsiyat, Robert Plomin, Robert M. Sapolski, egizak usul, asrab oluvchi ota-ona usuli.

"Genes influence behaviour, environment influences behaviour, genes and environment interact - that's what I chisel like a woodpecker about. This means that the action of a gene on an organism tends to change when the environment changes, and the action of the environment changes when there is a change in the set of genes."

[1]



Robert M. Sapolsky

To explore this topic, consider Robert Plomin's research paper. In a research paper by Robert Plomin "Psychogenetics: how genes influence our life" outlines two methods: the twin method and the foster-child method.

The twin method consists of comparing monozygotic and dizygotic twins. The monozygotic ones develop from one fertilized egg, the zygote. They are like clones of each other, they have the same DNA. The other type of twins (two-thirds of the total) are called dizygotic: they look like other siblings but developed at the same time in the same womb.[2]

His study involved 15 million twins. And the experiment showed that everything is inherited, i.e. psychological and physiological traits.

If the study of twins is a kind of biological experiment, then the study of families with adopted children is a social experiment.[2]

Much of who we are comes from family, our genes and upbringing. Psychologists have argued that schizophrenia is a family disease. But they didn't take into account that genetics plays an important role. Genetic material is inherited, the similarity of parents and children is 50%.

The twin method and the foster-child method have shown the key role of genetics in human formation. From the idea that nothing is inherited, we have moved on to the idea that everything is inherited.[2]

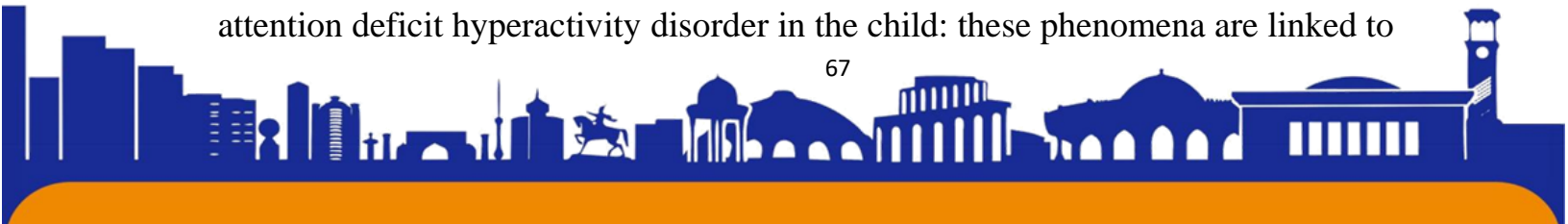
To explore in detail the role of genes in parenting and personality formation, I decided to analyse two children born in 2011 and 2012 who are the firstborns of different parents.

Child born in 2011: mother did not use cigarettes or alcohol during pregnancy, there were no aggressive influences from father's side. Stressful situations are minimal. Mother and father have no education. In further upbringing, only the mother was present, there was a divorce of the parents.

Child born in 2012: mother consumed tobacco products during pregnancy, did not drink alcohol. There were aggressive influences on the part of the father. Mother and father have no education. Both parents were involved in the upbringing.

Consider the two children on the facts that are available.

Maternal smoking during pregnancy has no effect on antisocial behaviour and attention deficit hyperactivity disorder in the child: these phenomena are linked to





common genetic factors. At the same time, maternal smoking during pregnancy directly affects the birth weight of the baby. We can see that the mother's living conditions strongly influence the baby during foetal development. If the mother is severely stressed, it can affect the mental development of the child.[3]

Intellectual side - is inherited, it also increases with age: one picks up the environment, shapes it.

The child is 2011, turning 12 years old. So far, only the mother is involved in his life. The child has an aptitude for mathematics. He has a good outlook. His school performance is good. Not aggressive. No defects.

The child, 2012, is turning 11 years old. His mother and father are involved in his life. No learning disabilities. Spends a lot of time on mobile devices. School performance is poor. Is aggressive. Has been seen stealing petty theft.

Are defects hereditary?

Modern geneticists study primarily the level of aggression. One such study in the 1990s found that members of the same male lineage in different generations had high levels of aggression with low levels of cognitive ability. And high levels of aggression under certain conditions can make a person more likely to offend.

It is worth paying attention to character and developmental traits. Interaction between genes and environment. If both nature and nurture are important - and they are, because genetics doesn't explain all the differences, it usually explains about half. Everything is inherited, so let's find specific genes. If you can find genes, you can do a lot more in your field of research as well as in solving specific problems. DNA is the best tool we have for predicting problems, and prediction will allow us to intervene in time to prevent them. This is the direction in which all medicine is heading.[2]

For example, instead of waiting until someone becomes an alcoholic and then trying to cure them (or waiting until someone becomes obese and then trying to cure them), it might be possible to predict problems to prevent them from occurring. This is important for both individuals and society as a whole.[2]

By comparing two children with different life situations and the possibilities their parents give them, we can understand that everything is inherited. If there are no obvious signs now, then the child may be predisposed to it. If parents have flaws, the child will be predisposed to them. Talents, too, tend to be transmitted.





An interesting experience, also given in the 2000's, was that it is not the genes themselves that are important, but how one thinks about them.

In one experiment, scientists divided students into two intellectually identical groups, giving them the same tasks. But the first group of students was indoctrinated with the idea that their level of intelligence was genetically determined and that it was impossible to leap ahead because genetics decides everything. The second group of students was indoctrinated with the idea that mental training and deliberate efforts in problem solving play a greater role in overall intelligence than genetic factors. As a result, the second group, which initially did not differ from the first group, had much better results than the first. Thus, it is not genes themselves, but people's belief in the role they play that has a very strong influence on a person's success in a particular area. If a person believes that he can do something, he really can do it, but if he does not believe in himself and "his genes", he really will not be able to do what he is given to do.[4]

I would like to add to my conclusion, how important the role of society is: genes do play a role in making us behave in an undesirable way. But our knowledge about these genes teaches us that we are all the more responsible for creating an environment in which interaction with these genes is favourable.

Literature:

1. From the book "Who are we? Genes, Our Body, Society." Robert M. Sapolsky
2. "Psychogenetics: how genes affect our lives". <https://postnauka.ru/faq/78075>
3. "Psychogenetics: how genes are studied using twins" <https://dzen.ru>
4. "Genes vs nurture..." <https://vlast.kz>

