

## Viewpoint: How genetics impact human intelligence

Stuart Ritchie, Scientist, who recently wrote a book on the scientific study of intelligence, wrote that human psychological traits are all heritable.

But they are not only determined by your genes, but also the environment, as during a child's development, parenting, healthcare, nutrition, education and availability of learning resources, are all contributing factors.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

There is no one "IQ gene," but the study, published in [Nature Genetics](#), is precise enough to determine that there are at least 22 specific genes related to intelligence. The researchers analyzed intelligence test scores and the complete genomes of over 78,000 people.

Only ten or fifteen years ago, studying the DNA of one person, let alone 78,000, would have been impractical. Now scientists can use this wealth of data to find the specific arrangements of molecules that code for differences in the brain.

The 22 genes implicated in intelligence made sense, too—they were genes previously shown to be involved in regulating the growth of neurons, for example. A gene being statistically associated with intelligence does not mean it is solely responsible for how well you'll do on an IQ test. A lot of other factors come into play, and a gene is only and together, these 22 genes accounted for about 5% of the differences in intelligence scores.

[\*\*This is an excerpt. Read the full article here\*\*](#)