DNA accounts for almost 10% of academic achievement, scientists find

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DNA variants explain almost 10% of differences in academic achievement in 16-year-olds, a study has found.

The research shows that DNA on its own is better at predicting educational attainment than gender or "grit" – a personality trait thought to reflect perseverance and the ability to pursue long-term goals.

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For each person, [researchers] produced a "polygenic" genetic influence score based on 20,000 known DNA variants – single letter changes to the genetic code known as single nucleotide polymorphisms or SNPs.

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On average, those with higher polygenic scores obtained A and B grades. Average results of students at the other end of the scale were a whole grade lower.

Senior study author Professor Robert Plomin…said: "We are at a tipping point for predicting individuals' educational strengths and weaknesses from their DNA. Polygenic scores could be used to give us information about whether a child may develop learning problems later on[."]

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Lead researcher Saskia Selzam…said: "Through polygenic scoring, we found that almost 10% of the differences between children's achievement is due to DNA alone."

Read full, original post: Success at school 'partly explained by genetics'