## DNA as 'fortune teller'? There are limits as to what genes can predict

Is our future written in our genes?

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King's College London geneticist Robert Plomin, in his new book, <u>Blueprint</u>, presents DNA as a "<u>fortune-teller</u>" that is "100 percent reliable" and that can "predict your future from birth." He also argues that the "only systematic, stable and long-lasting source of who we are is DNA." A U.S. company, Genomic Prediction, recently said it will offer embryo selection based on polygenic scores for intelligence.

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But these discussions have overlooked a much more fundamental limit in our ability to predict or control our psychological traits. Most such traits are only partly heritable—that is, only a certain proportion of the variation we see in the trait across the population can be attributed to genetic differences between people. For intelligence, the heritability is about 50 percent.

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This places a firm limit—in principle, not just in practice—on the level of precision associated with genomic prediction of psychological traits. We can certainly use genetics to look at statistical effects across the population, but this will give at best very fuzzy predictors for individuals. No matter how good our understanding of the genetics of intelligence gets, we will never be able to predict intelligence of individuals with accuracy from genomic information.

Read full, original post: Is Our Future Really Written in Our Genes?