Genes help determine when you will lose your virginity, say scientists

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When you lose your virginity and how many children you will have are partially determined by genetics, Cambridge University has found.

A study of over 380,000 people has identified [gene mutation](https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0ahUKEwiRq6Xj3JjMAhVJlCwKHafdDTQQFggpMAI&url=http%3A%2F%2Fwww.telegraph.co.uk%2Fnews%2F2016%2F04%2F06%2Fsex-offending-is-written-in-dna-of-some-men-oxford-university-fi%2F&usg=AFQjCNEemJOL6hJokIlOpYRsa3SnWeUoaA)s which influence the age of puberty, sexual intercourse, first birth and number of offspring.

Previously researchers thought that such intimate decisions were based purely on social factors such as family upbringing and peer pressure.

But it appears that innate traits, linked to personality, play an important role.  In the nature versus nurture debate, scientists believe that 25 per cent of sexual and fertility choice is driven by genes and 75 per cent by environment.

“While social and cultural factors are clearly relevant, we show that age at first sexual intercourse is also influenced by genes which act on the timing of childhood physical maturity and by genes which contribute to our natural differences in personality types," said Dr John Perry, a senior investigator scientist at the [Medical Research Council](https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwivy8Tc3JjMAhXMDCwKHcEOCQwQFggdMAA&url=http%3A%2F%2Fwww.mrc.ac.uk%2F&usg=AFQjCNEw0LNteJAxAvgwknFXQIIQ1fNx7g) (MRC) Epidemiology Unit at the University of Cambridge.

“One example is a genetic variant in *CADM2*, a gene that controls brain cell connections and brain activity, which we found was associated with a greater likelihood of having a risk-taking personality, and with an earlier age at first sexual intercourse and higher lifetime number of children.”

Researchers analysed the genetic data of 59,357 men and 66,310 women aged between 40 and 69 years old part of UK Biobank, a national study for health research.

In previous studies by the same team, it was found that an earlier age at puberty is linked to increased long-term risks for diseases such as diabetes, heart disease and some cancers.

Dr Ken Ong, a paediatrician and programme leader at the MRC Epidemiology Unit, and a lead author on the paper, added: “We have already shown that early puberty and rapid childhood growth adversely affect disease risks in later life, but we have now shown that the same factors can have a negative effect at a much younger age, including earlier sexual intercourse and poorer education attainment.”

The team hope that taking account of the timing of puberty and personality type could lead to more targeted and effective approaches to health interventions and promotion of healthy behaviours.