

## Athletes and gay men: Behavioral genetics reveals puzzle pieces, not prophecy

There's an interesting dichotomy in our public understanding of genetics and behavior. Every day, we read of new studies that point to the genetic underpinnings of behavior. As our ability to probe the human genome improves at staggering rates, we're able to detect ever-smaller correlations and connections between our genes and our lives.

Take [this New York Times piece about the genetics of being a risk-taker](#). "A [recent study](#)," writes Gretchen Reynolds, "of the genetics of risk-taking intimates that their behavior may be motivated, at least in part, by their DNA."

Yet upon further reading, Reynolds reveals that the entire study hinges on a genetic variation that accounts for only "about 3 percent of the difference in behavior between risk takers and the risk averse." The finding is statistically significant within the realm of science, yes, but it is significant in terms of how any individual might be impacted? That means that 97% of the differences between risk-takers and the risk-averse remain unexplained.

This is a relatively benign example. No one, to my knowledge, has jumped to the defense of risk-takers to prevent a eugenic crusade against daredevils. However, a [recent flurry](#) of "[gay gene](#)" headlines has stirred controversy, as any attempt to study the genetics of a socially-charged trait is wont to do.

[A few details](#): the study that sparked this surge of headlines, led by sex researcher Michael Bailey of Northwestern University, was presented as preliminary findings at the American Association for the Advancement of Science in Chicago. Bailey and his fellow researchers did not claim to find a specific gay gene; rather they've identified a sizable chunk of genetic material common among gay men. Genetics is responsible for determining between 30%-40% of a population's variation in sexual preference.

[The Guardian's commentary on the study by Nick Cohen](#) includes the alarming sub-head: "If you welcome research that says being gay results from genetic inheritance, don't be surprised when they start offering a 'cure'."

This knee-jerk fear that any effort to identify the genetic underpinnings of homosexuality might result in mass genetic screening to eliminate gay babies is understandable — but unfounded. In this specific case, the concern resulted from poor writing, or at least poor headline writing on a hot-button social issue. Nobody actually has found a "gay gene."

We haven't yet, but as [The Conversation's Tim Spector notes](#): "No genes have actually been found to consistently influence homosexuality solely because genetic studies have been far too small; it took more than 34,000 people and 20 labs [to find one little gene variant](#) that influenced 0.1 percent of blood pressure—wow."

The "0.1 percent" and the "wow" encapsulate the situation: the genetic underpinnings of behavior are new, exciting, fascinating—and typically of remarkably little influence on our daily lives. Why we act the way we

do — whether it's adrenaline junkies or being attracted to someone of the same sex — is a very large puzzle. Studies like the two mentioned are little more than attempts to find the right pieces for genetics' particular corner of the puzzle. We should take a careful look at each piece of the puzzle, but using them to make predictions of social good or ill does no service to science or society.

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