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New research: Genes may influence popularity

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A groundbreaking study of popularity by a Michigan State University scientist has found that genes elicit not only specific behaviors but also the social consequences of those behaviors.

According to the investigation by behavioral geneticist S. Alexandra Burt, male college students who had a gene associated with rule-breaking behavior were rated most popular by a group of previously unacquainted peers.

It's not unusual for adolescent rule-breakers to be well-liked – previous research has made that link – but Burt is the first to provide meaningful evidence for the role of a specific gene in this process. The study appears in the latest issue of the Journal of Personality and Social Psychology, which is published by the American Psychological Association.

"The idea is that your genes predispose you to certain behaviors and those behaviors elicit different kinds of social reactions from others," said Burt, assistant professor of psychology. "And so what's happening is, your genes are to some extent driving your social experiences."

The concept – which researchers call "evocative gene-environment correlation" – had been discussed in scientific literature but only in theory. This study is the first to really flesh out the process, establishing clear connections between a specific gene, particular behaviors and actual social situations, she said.

Burt collected DNA from more than 200 male college students in two separate samples. After interacting in a lab setting for about an hour, the students filled out a questionnaire about whom they most liked in their group. In both samples, the most popular students turned out to be the ones with a particular form of a serotonin gene that was also associated with rule-breaking behavior.

"So the gene predisposed them to rule-breaking behavior and their rule-breaking behavior made them more popular," Burt said.

Burt is working on similar studies with female college students, as well as mixed-gender social groups. She also plans to explore associations with other social behaviors and other genes in larger samples.

Source: Michigan State University