

# Views about the Genetics of Crime

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## INTRODUCTION

The early 2000s were witness to the search for a “crime gene” that was thought to be the cause of one’s criminal behavior. No evidence of such a gene was found, but scholars have discovered that multiple genes operating on the expression of certain behaviors (e.g., antisocial behavior) can affect propensity for criminal behavior when they are triggered by criminogenic environments.

At the same time, in the modern courtroom, the defendant’s genetic makeup has been used to determine culpability and thus severity of the sentence. As the science has progressed, many individuals still find it hard to believe that genetics and criminal behavior are associated with one another and most are surprised to learn that genetic information is used in the courtroom.

The aim of this project was to measure the beliefs of UC criminal justice students regarding the relationship between genetics and criminal behavior. Participants took part in an anonymous web-based survey in which they answered questions about their beliefs about the genetic influence on crime.

### *Research Questions*

1. How much do CJ students believe genes influence behavior?
2. When given information about genetic risk factors, how punitive are CJ students toward a hypothetical offender?

## METHODS

*Participants:* Undergraduate students attending the University of Cincinnati who are over the age of 18 and are enrolled in classes in the School of Criminal Justice ( $N=38$ )

*Measures:* Participants took a Qualtrics at the end of April 2020. All submissions were anonymous. Statistical analysis was conducted on responses to two questions of interest.

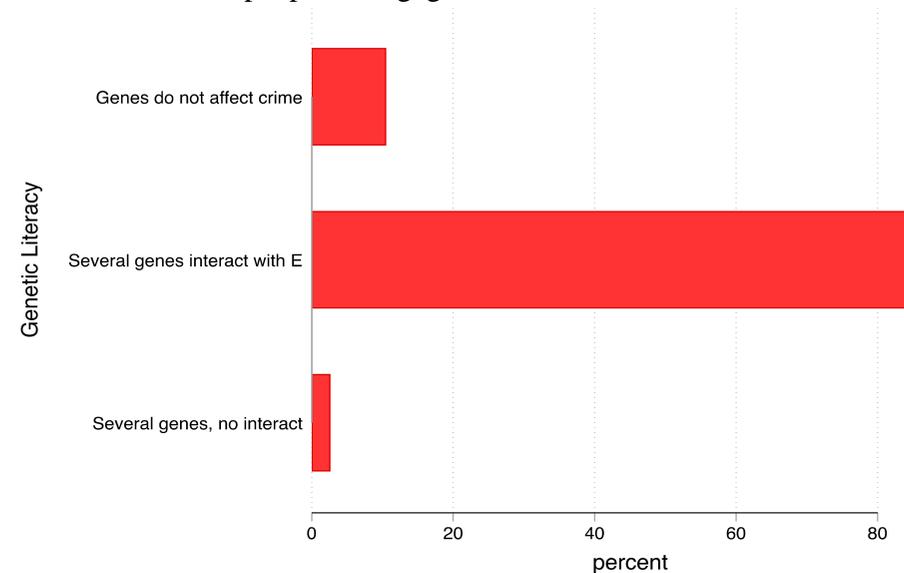
*Procedures:* The survey consisted of 5 multiple-choice questions, 4 Likert-scale questions, and a vignette about a hypothetical offender that was followed by 2 multiple-choice questions and a slider scale question.

## RESULTS

Participants were given the following prompt:

Humans have about 20,000 genes. Which of the following best describes how you think genes are related to crime:

- 1) There is a single “crime gene” that leads people to engage in crime.
- 2) There are several or more genes that lead people to engage in crime.
- 3) Several genes, when activated by a bad environment (e.g., poor parenting or neighborhood), lead people to engage in crime.
- 4) Genes do not lead people to engage in crime.

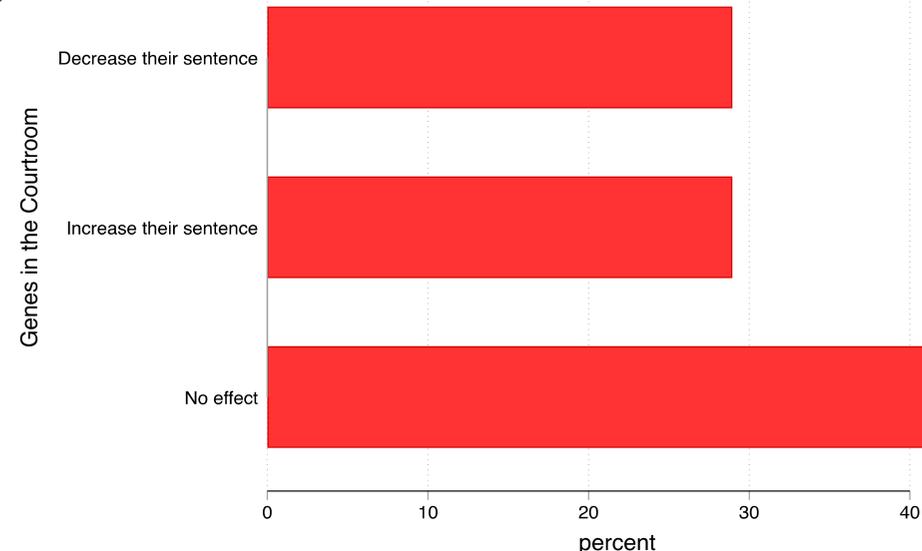


Participants were given the following prompt:

In 2012, John Doe was arrested for the murder of Jane Doe. Before and during the time of the murder, John was a part of a research study that examined his genetic makeup. The study found that John has genetic markers that lead to a high risk of developing aggressive behavior, impulsivity and risk-taking behavior.

In court, do you believe looking at the genetic makeup of a defendant will

- 1.) Increase their sentence
- 2.) Decrease their sentence
- 3.) No effect



## DISCUSSION

### *Summary of Findings*

The results from the first question show that 86% of the participants selected what research has shown to be the right answer. This is an encouraging finding in that UC undergrad students are conscious of this topic and are aware that genes do not act in isolation of the environment.

The results from the second question show that when given genetic information about a defendant, 42% of students believe this would have no effect on the sentence of the defendant, while the remainder are split between the other two options (it will increase/decrease the sentence). This reveals that UC students are thoughtfully reflecting on genetic information and how/if it should be used in the courtroom.

### *Limitations*

Sample: The results from this sample may not reflect the larger population because our sampling frame only included UC undergrads in the School of Criminal Justice.

Data Collection: Using an extended survey or questionnaire with more questions regarding the topic of study would give us more insight into how these perceptions connect with other beliefs those individuals hold.

### *Implications and Future Directions*

There is no empirical research that measures the public’s beliefs about the relationship between genetics and crime. This research may help guide public policy discussions and help scholars gain a greater understanding on how the public wants to respond to crime in courtroom settings.