

# The Impact of Cognitive Behavioral Therapy on Youth Violence and Dropout in the United States

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**Sector(s):** Crime, Violence, and Conflict

**Location:** Chicago, United States of America

**Sample:** 2,740 youth

**Target group:** Students Men and boys Urban population Youth People with a criminal record

**Outcome of interest:** Arrests and convictions Dropout and graduation

**Intervention type:** Psychosocial support

**AEA RCT registration number:** <https://www.socialscisceregistry.org/trials/1969>

**Research Papers:** Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in ..., Preventing Youth Violence and Dropout: A Randomized Field Experiment, The (Surprising) Efficacy of Academic and Behavioral Intervention with Disadvan...

Violence and crime concentrate disproportionately among young men in low-income settings, with detrimental effects on these men, their victims, and their communities. In the United States, researchers evaluated the impact of a cognitive behavioral therapy (CBT) program designed to teach high-risk male students in secondary schools to regulate harmful, automatic behaviors. The program led to a drop in arrests, especially for violent crimes, and increased students' chances of graduating on time, with overall societal benefits estimated at five to thirty times greater than the program's costs.

**Policy issue**

In the United States, violence and crime concentrate disproportionately among young men of color in low-income settings, with detrimental effects on these men, their victims, and their communities. Various systemic factors contribute to these challenges, affecting not only the choices young men make, but how they think about making those choices. Cognitive behavioral therapy (CBT) is a comprehensive intervention to reduce self-destructive behaviors by teaching individuals to evaluate and modify the way they think and the decisions they make. Since the 1970s, CBT has been used to address mental health disorders such as depression, and policymakers globally are increasingly interested in using similar interventions to deter criminal and violent behavior. In contrast to policing approaches such as increased enforcement or broad social initiatives such as employment programs, CBT is targeted and short-term, making it a relatively inexpensive policy option.

Previous research suggests that CBT can help reduce crime and violence, but existing rigorous evaluations primarily focus on model programs with relatively few participants, rather than programs at scale in real-world settings. Researchers conducted two randomized evaluations to test the impacts of a large CBT program in Chicago Public Schools called Becoming a Man (BAM), targeted towards young male students at highest risk of failure.

### **Context of the evaluation**

BAM is a program implemented by the non-profit organization Youth Guidance, targeted towards male secondary-school students in Chicago Public Schools at highest risk of failure. The students in these evaluations missed an average of 6–8 weeks of the school year, and one-third to half of them were old for their grade. About one-third had been arrested before.



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### **Details of the intervention**

Researchers conducted two randomized evaluations to test the impact of BAM on schooling outcomes and criminal behavior among high-risk male students in Chicago Public Schools. The first evaluation took place during the 2009-2010 school year, among 2,740 male 7<sup>th</sup> to 10<sup>th</sup> graders. The second evaluation took place over two school years from 2013-2015, among 2,064 male 9<sup>th</sup> and 10<sup>th</sup> graders. In both evaluations, half of participants were randomly enrolled in BAM, while the other half were not and formed the control group.

BAM students were offered weekly, one-hour group sessions during the school day over the course of each school year. In the first evaluation, students were offered 27 of these sessions over one school year, and attended an average of thirteen. In the second evaluation, students were offered 45 sessions over two school years, and attended an average of nineteen. The program included a simple, standardized curriculum that could be taught by facilitators with no formal training in social work or psychology. BAM facilitators were young, college-educated men, often from similar neighborhoods as the students.

The weekly sessions incorporated standard elements of CBT, featuring a variety of activities encouraging reflection and introspection, role-playing, discussions, and skill-building, as well as experiential exercises. For example, in one activity, called "The Fist," students were told to get an object from a partner, and many tried to use force. Afterwards, the counselor asked questions of the group to highlight how their partners might have been willing to give them the ball if they had simply asked for it.

To measure BAM's impact, researchers used Chicago Public School records as well as arrest data from the Illinois State Police and the Chicago Police Department to track students' schooling outcomes and criminal behavior through 2015, five years after the first evaluation and covering the two program years of the second evaluation.

## **Results and policy lessons**

Results from both evaluations demonstrated that BAM led to a significant drop in arrests per student, especially for violent crimes, and increased school engagement and high school graduation rates. BAM may have been effective because the program reduced automatic, impulsive behaviors by helping participants slow down their decision-making processes to better assess situations and choose appropriate responses.

Across all BAM recipients, arrests per student decreased by 12 percent by the end of the program, relative to the control group, though these effects disappeared one year later among participants of the first evaluation (for whom longer-term data is available). Violent crime arrests among program participants dropped 20 percent.

Students who received BAM were also more engaged in school. BAM participants scored 0.1-0.19 standard deviations higher relative to the control group on an index measuring grade point average, attendance, and enrollment. Results from the first evaluation suggest that these effects persisted one year after the program. BAM students in the first evaluation were also 9 percent more likely to graduate high school on time. These effects could be particularly important in the long term as increased school achievement can lead to improvements in lifetime earnings and health.

BAM may have been effective because participants learned strategies to relate to their environment, slowing down their decision-making processes and reducing automatic behaviors. In a game that researchers designed to test decision-making, BAM students took about 80 percent longer than control students to decide how to respond to a peer in a money transaction scenario designed to test decision-making, suggesting that BAM students had slowed down their automatic or impulsive responses. Researchers estimate this reduction in automatic behaviors could account for a third of the total decline in arrests.

These results suggest that CBT can be a cost-effective approach to reduce criminal behavior among high-risk young men in cities. Researchers estimate BAM's overall societal benefits were anywhere from five to 30 times greater than the program's cost, which ranged from US \$1,100 to US\$1,850 per student per year. BAM has since been scaled up across Chicago Public Schools, and is being implemented in Boston Public Schools.

Guryan, Jonathan, Sara Heller, Jens Ludwig, Sendhil Mullainathan, Harold Pollack, and Anuj Shah. 2017. "Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago." *The Quarterly Journal of Economics* 132 (1): 1-54.