RESEARCH BRIEF • SEPTEMBER 2023

A Cognitive View of Policing

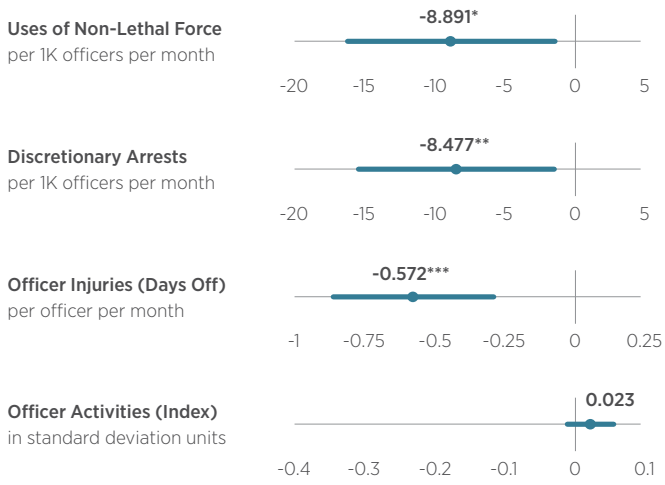
Based on BFI Working Paper No. 2023-118 "A Cognitive View of Policing," by Oeindrila Dube, University of Chicago; Sandy Jo MacArthur, California Southern University; and Anuj K. Shah, University of Chicago

Prevailing views suggest that adverse policing outcomes are driven by problematic police officers and deficient policies. This study highlights an overlooked factor – cognitive demands inherent in police work. A training designed to improve officer decision-making under stress and time pressure, two key cognitive demands, lead to 23% fewer uses of force and discretionary arrests, and 11% fewer arrests of Black civilians. The results demonstrate the power of leveraging behavioral science insights to make policing more effective and equitable.

Policing practices have increasingly come under public scrutiny, spurring widespread calls for police reform. To date, prevailing views have attributed adverse policing outcomes (such as excessive force and unnecessary arrests) to factors such as prejudiced officers and deficient departmental policies. In this paper, the authors introduce a new focus that explores the role of cognitive demands in contributing to poor policing outcomes. Police work often involves making complex decisions in situations that produce stress, trigger many emotions, and require officers to act quickly. These cognitive demands make it more likely that officers will act without sufficient deliberation and that their actions will be driven by cognitive biases. In this paper, the authors explore this overlooked perspective, which suggests an additional avenue for improving policing outcomes.

To test their idea, the authors develop and evaluate a new training, called Situational Decision- making (Sit-D), which combines a deep understanding of day-to-day policing with insights from behavioral science on how to train people to process information and make decisions more

Figure 1 · Impact of Training on Officer Outcomes



Note: This graph plots the impact of the Sit-D training during the key evaluation period (1-4 months after the training) on four officer outcomes: uses of non-lethal force, discretionary arrests, days off for officer injuries, and an index of officer activities (comprising twelve different activities). The dots represent the coefficient on the regression estimate of Sit-D and the horizontal lines show the 90% confidence intervals. ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

deliberately. The Sit-D training aims to help officers go beyond their initial impression of cognitively demanding situations and develop alternative interpretations.

The authors evaluate the training using a large-scale randomized controlled trial with officers from the Chicago Police Department (CPD)—the second largest police department in the US. Their sample comprises 2,070 officers—nearly one-fifth of all active duty sworn personnel in the department. They use data from an endline assessment officers complete four months after the training, as well as administrative records to assess the impacts of the training. They find the following:

- Officers who participate in Sit-D are significantly more likely to consider a wider range of evidence and develop more explanations for subjects' actions. They are also better at recalling information that went against their initial assumptions, and more likely to update their responses as situations changed.
- Sit-D reduces adverse outcomes in the field. CPD administrative data show that officers who participate in Sit-D are 23% less likely to use non-lethal force and 23% less likely to make discretionary arrests, compared to officers who don't participate in training.
- Sit-D also leads to a 11% reduction in the overall arrests of Black subjects, without exerting any corresponding effects on the arrests of white subjects, or subjects of any other races. Thus, the training mitigates racial disparities in policing, though it does not focus explicitly on racial bias.
- The training does not appear to make officers less effective, and boosts safety. There is no reduction in overall activity among officers who participate in Sit-D (measured in terms of items such as firearm recoveries, driver stops, warrants, and citations). In addition, Sit-D officers experience substantially fewer injuries in the four months following training.
- The effects appear to diminish over the course of the year, although it is unclear precisely when this occurs. The authors analyze administrative data 5-8 months as well as 9-12 months after the training ends. The effects on adverse policing outcomes appear to be smaller in these latter periods, but in statistical terms, they are not significantly different than the effects over the first four months after the training. An implication of this pattern is that refresher trainings may be needed to strongly sustain the effects of Sit-D over the course of the year.
- The cost of Sit-D per trained officer is similar to the cost of other trainings from large police departments, but there is no corresponding evidence of the effectiveness of these other trainings. While the total economic benefits of Sit-D are diffuse and hard to value, the value of reduced officer injuries in the first four months after the training alone is $1,062 per officer, which more than offsets the cost of the program ($807-$864).

These results highlight the value of considering the cognitive aspects of policing, and demonstrate the power of using behaviorally informed approaches to improve officer decision-making and policing outcomes. Teaching officers to navigate these cognitive demands not only reduce adverse policing outcomes, but also have the potential to reduce racial disparities in policing.

READ THE WORKING PAPER

NO. 2023-118 · SEPTEMBER 2023

A Cognitive View of Policing

bfi.uchicago.edu/working-paper/2023-118

ABOUT OUR SCHOLARS

Oeindrila Dube
Philip K. Pearson Professor of Global Conflict Studies, Harris School of Public Policy
harris.uchicago.edu/directory/oeindrila-dube

Anuj K. Shah
Associate Professor of Behavioral Science, Chicago Booth
chicagobooth.edu/faculty/directory/s/anuj-shah

THE UNIVERSITY OF CHICAGO HARRIS SCHOOL OF PUBLIC POLICY

CHICAGO BOOTH
The University of Chicago Booth School of Business