

POLITICAL SCIENCE

Re-evaluating police militarization

Politicians and law enforcement officials have advocated the militarization of local law enforcement on the grounds that it promotes public and officer safety, and some early research seemingly supported those claims. Two new studies reveal limitations in the data used in this prior work. When these issues are addressed, evidence for the benefits of militarization largely vanishes.

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Heavily armed and armoured police officers were once again deployed across the United States to suppress nationwide public demonstrations this summer against racial bias and police brutality. While such images remain jarring to many Americans, militarization—a combination of equipment, tactics and culture developed for theatres of war—has become a regular feature of law enforcement in the United States, especially in communities of color^{1,2}. And though civil rights activists and police reformers have been calling for the demilitarization of local law enforcement for years, police administrators and elected leaders often defend the phenomenon, claiming it reduces crime and keeps officers safe. For example, in reversing Obama-era restrictions on the distribution of military gear to localities, former Attorney General Jeff Sessions proclaimed:

“Studies have shown [surplus military] equipment reduces crime rates, reduces the number of assaults against police officers, and reduces the number of complaints against police officers. Those restrictions went too far. We will not put superficial concerns above public safety.”³

Social scientists have produced a raft of studies in recent years testing these assertions, arriving at mixed conclusions. But two new studies in the current issue of *Nature Human Behaviour*^{4,5} offer compelling evidence that may help resolve this debate. In short, both studies show in different ways how a main source of data used to study the consequences of militarization is coarse, faulty or incomplete and that once those issues are addressed, evidence for the purported benefits of crime reduction and officer safety largely vanish.

By far, the most prevalent data source used to study the consequences of militarization in recent years has been the federal government’s 1033 Program database, named for the Department of Defense initiative that has funnelled billions



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of dollars in excess military weapons and gear to local agencies since the 1990s. While a valuable resource, especially given the general lack of data on militarized policing, this dataset has many important deficiencies that can easily skew inferences if ignored.

Gunderson et al.⁴ shine a spotlight on several of these concerns, paying particular attention to the fact that early and influential studies^{6,7} relied on a version of 1033 Program data that was aggregated at the county level. Because agencies, not counties, receive excess military equipment, analysing county-level 1033 Program data can easily lead to ecological fallacies. For example, as Gunderson et al.⁴ note, “if crime rates are declining for urban agencies and [military gear] transfers are large for suburban agencies in the same counties, then a county-level analysis would mistakenly attribute the urban crime reduction to the suburban use of [military gear].” Gunderson et al.⁴ replicate and extend prominent analyses that used county-level data, and the results suggest that exactly such ecological fallacies were driving earlier results. When properly analysed at the agency level, the data show no compelling indication that receiving military equipment reduces local crime.

Level of aggregation is not the only problem with 1033 Program data. The database was not designed to track every piece of equipment agencies have

possessed over time, but rather meant to reflect a snapshot of some equipment that agencies possess at any given time point. In addition, agencies can return equipment to the Department of Defense, destroy it or trade it with other agencies, often in ways that are invisible to the data analyst. As a result, Gunderson et al.⁴ demonstrate, 1033 Program data often suffer from a number of missing-data problems. Because of these features, using the data at face value to estimate how the acquisition of equipment correlates with agency-level crime and officer safety over time—a necessity for many causal research designs—is fraught.

To characterize the extent of these issues, Lowande⁵ traces individual pieces of equipment across 22 versions of the 1033 Program data to see how often items get transferred, returned or disappear entirely. Crucially, this analysis reveals that “attrition within law enforcement inventories is common—about one in five weapons are returned or destroyed within 5 years—and that it is associated with policing outcomes. This implies the estimated effects of equipment on crime are biased in all previous research that transforms one publicly available active inventory into a time series.”

To produce a credible assessment of the impact of the 1033 Program in the face of these obstacles, Lowande⁵ identifies a natural experiment in which the Obama administration ordered various classes of military weapons and vehicles returned to the federal government. The sudden implementation of the order, the high rate of compliance by agencies and the fact that some localities were exempt from recalls for arbitrary reasons that are likely unrelated to policing outcomes allow for a causal assessment of the effect of decreasing levels of militarization. The results indicate that losing military equipment has no discernible impact on crime, officer deaths or assaults, calling into question purported improvements in all these areas.

These studies provide important corroboration of conclusions in previous work. For example, Mummolo² analysed data on the formation and deployment of special weapons and tactics (SWAT) teams—an alternate measure of militarization—and finds no evidence they reduce crime or enhance officer safety. The fact that two additional analyses using a different data source arrive at broadly similar conclusions should give pause to anyone claiming militarization enhances public or officer safety. When clean data are analysed

properly, there is little evidence for the purported benefits of police militarization. □

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References

1. Kraska, P. B. *Policing* **1**, 501–513 (2007).

2. Mummolo, J. *Proc. Natl Acad. Sci. USA* **115**, 9181–9186 (2018).
3. Sessions, J. 2017. Attorney General Sessions delivers remarks at the 63rd Biennial Conference of the National Fraternal Order of Police. *United States Dept. of Justice* <https://www.justice.gov/opa/speech/attorney-general-sessions-delivers-remarks-63rd-biennial-conference-national-fraternal> (2018).
4. Gunderson, A. et al. *Nat. Hum. Behav.* <https://doi.org/10.1038/s41562-020-00995-5> (2020).
5. Lowande, K. *Nat. Hum. Behav.* <https://doi.org/10.1038/s41562-020-00986-6> (2020).
6. Bove, V. & Gavrilova, E. *Am. Econ. J. Econ. Policy* **9**, 1–18 (2017).
7. Harris, M. C., Park, J., Bruce, D. J. & Murray, M. N. *Am. Econ. J. Econ. Policy* **9**, 291–313 (2017).

Competing interests

The author declares no competing interests.