Guns and the Limits of Numeracy: Review of *How America Got Its Guns: A History of the Gun Violence Crisis*, by William Briggs.

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Abstract

William Briggs. 2017. *How America Got Its Guns: A History of the Gun Violence Crisis*; (Albuquerque, University of New Mexico Press). Paperback: ISBN 978-0-8263-5813-4. E-book ISBN 978-0-8263-5814-1.

Mathematician William Briggs (co-author of the well-regarded *Understanding and Using Mathematics*) has written a remarkably thorough and evenhanded analysis of gun policy in the United States that draws upon the work of historians, legal scholars, social scientists, and advocates. He gives respectful hearings to claims about the importance of both gun rights and gun control. The breadth of his coverage makes it almost certain that any reader will discover new angles for thinking about gun issues.

Keywords

guns, popular hazards, social policy, social problems, statistics

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Cover Page Footnote

Joel Best is a professor of sociology and criminal justice at the University of Delaware. His books include *Damn Lies and Statistics* (University of California Press, 2001), *More Damned Lies and Statistics* (University of California Press, 2004), *Flavor of the Month: Why Smart People Fall for Fads* (University of California Press, 2006), *Stat-Spotting: A Field Guide to Identifying Dubious Data* (University of California Press, 2008), *The Stupidity Epidemic: Worrying about Students, Schools and America's Future* (Routledge, 2011), *American Nightmares: Social Problems in an Anxious World* (University of California Press, 2018), and *Is That True? Critical Thinking for Sociologists* (University of California Press, 2021). His papers in Numeracy include a perspective ("Birds—Dead and Deadly: Why Numeracy Needs to Address Social Construction") in the journal's first issue (Jan. 2008).

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So, what is a review of a book about the history of gun violence as a social issue doing in *Numeracy*? Perhaps this book shows the relevance and importance of statistical evidence in shaping public policy? Not really. While Briggs certainly refers to a wide range of statistics about firearms, he concedes that the available numbers aren't very good, and they can't do much to guide our thinking about what should be done.

Take what is probably the most frequently mentioned figure—the number of "gun deaths." Statistics about fatalities are usually pretty good: death seems to be an unambiguous outcome, and all deaths are supposed to be recorded. According to the Gun Violence Archive (n.d.), which tries to collect reports of all instances of people being shot, there were 43,546 gun-violence deaths in 2020. The first thing to understand about that figure is that 24,156 (55.5%) of those gun deaths were suicides, and the remaining deaths include accidents, as well as homicides by police officers and by people using guns to defend themselves. While criminal homicides may be what tend to come to mind when we hear people talking about gun deaths, such crimes account for a minority of all cases. In 2019—the most recent year for which data are available—the FBI counted 10,258 criminal homicides using firearms.

While counting fatalities may not measure quite what we first imagine, other statistics about firearms are even more deeply flawed. For instance, how many Americans are gun owners? There are no official records because guns are not registered. Therefore, the best data on gun ownership come from Gallup and other public opinion polls asking people whether they own a gun. But it is easy to imagine that some gun owners might be reluctant to reveal that they have guns, so the accuracy of these figures is uncertain.

And—here's the real showstopper—no one has any idea how many guns are out there. It certainly seems likely that there must be some hundreds of millions of guns in the US. For decades, people have suggested that there probably is at least one gun for every person (i.e., over 300 million), but no one really knows. Most people don't own a gun, but then there are people who have lots of them.

In other words, our tallies of guns, gun owners, and even fatalities are at best incomplete, and sometimes little more than guesses. To be sure, people engaged in debates over gun policies frequently cite numbers, usually cherrypicked to support their positions. How often are guns used by law-abiding citizens to protect

themselves? Gun-rights advocates' statistics suggest that such cases are common, while gun-control activists' figures imply that they are rare, and so on.

There is another issue contributing to bad gun data. Gun-rights advocates are suspicious of government activities that might impinge in any way on the freedom they consider guaranteed under the Second Amendment. As a result, there are narrow restrictions prohibiting assembling databases that might be used for statistical purposes. Thus, while licensed gun dealers are required to do background checks with the federal National Instant Criminal Background Check System, the only records of those requests are kept by the individual gun dealers who made them; they are not compiled into any sort of government database. Similarly, Congress has restricted federal support for research on gun violence. That is, there are policies intended to block the collection of data that are seen as potentially leading to interfering with gun rights.

All this suggests the limits of numeracy in any effort to shape firearms policy. Numbers aren't going to resolve the debate, because guns are a popular hazard—that is, it is true both that guns are very popular (lots of people want to have guns), and that they sometimes prove to be hazardous (in that people get shot). Popular hazards pose challenges for policymakers.

Consider cars. The US has over 200 million licensed drivers and nearly 300 million registered motor vehicles. According to the National Safety Council (n.d.), there were 42,060 traffic fatalities in 2020, a figure strikingly close to the number of gun violence fatalities. (Interestingly, both death tolls rose during 2020, which might have had something to do with the coronavirus pandemic). So, we have hundreds of millions of guns and hundreds of millions of cars; and in 2020 guns and cars each led to 40-some thousand annual deaths. Cars and guns are popular hazards, and there are lots of other popular hazards that are enjoyed by many people, even as they wind up harming a much smaller number of folks. Think of alcohol, bicycles, cigarettes, credit cards, gambling, the Internet, marijuana, motorcycles, pornography, power tools, swimming pools, video games, and on and on. In each case, many people get involved, and a much smaller number have their lives wrecked.

Popular hazards cause people to disagree about how society should respond, how it should weigh the relative benefits (that is, the various reasons for their popularity) versus risks. Some popular hazards are viewed as perfectly respectable, others are regulated or even banned. In many cases, these definitions have shifted over time: not that long ago, gambling and pornography were illegal, but now we have legal gaming and erotica industries. Meanwhile, new policies discourage smoking and diving boards.

Data play a complicated role in these debates. In some cases, data can be important. Not only has a mountain of evidence linked smoking to health problems, but tobacco's estimated death toll (usually cited as 480,000) outstripped all other

popular hazards. The mounting evidence justified policies intended to discourage smoking by making it more expensive and less convenient, although notice that it remains tolerated. On the other hand, in the cases of marijuana and pornography, as data accumulated, it became increasingly easier to argue that the hazards had been exaggerated.

Often, people engaged in these policy debates insist that the matter is straightforward, that society simply should welcome or forbid some popular hazard, but in practice, things aren't that simple. Alcohol damages a lot of lives, but after the spectacular meltdown of Prohibition, there is no stomach for another effort to ban it. Thus, most popular hazards are regulated or restricted (e.g., limiting access to the underaged).

Briggs ends his book with a set of recommendations for modest reforms. Remembering that suicides account for most gun deaths, it may be possible to better prevent suicide attempts "through enhanced prevention, intervention, and mental-illness and gun safety programs" (269), and so on. It is worth recalling that this sort of nibbling-away-at-the-problem approach successfully reduced the traffic fatality rate (per 100 million miles driven) by about 80 percent. We can't know how many deaths side-impact airbags have prevented, but they have doubtlessly helped to some degree. Even the modest suggestions made by Briggs could help reduce firearms' death toll.

Numbers and numeracy cannot eliminate social problems by providing simple solutions. Policies emerge within a cultural context that constrains what is possible. The predictable debates that arise after each report of a mass shooting are simply evidence that guns—like cars—are a popular hazard. Still, numeracy is an essential element in the critical thinking needed to make social problems better.

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