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Opinion: Why it’s impossible to predict mass shootings like San Jose

Sheldon Jacobson
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If mass shootings followed any sort of intuitive logic, one might have guessed that a year of COVID-19 induced lockdowns would have at least temporarily quelled America’s propensity towards gun violence.

It didn’t. Mass shootings jumped to record highs in 2020 when you include events with both deaths and injuries.

The recent Boulder shooting, and now the tragedy unfolding in San Jose, shows that little appears poised to change as society reawakens from its slumber.

There are numerous definitions of mass shootings. It can be an event that leads to four or more victim deaths, not including the perpetrator. Or it can be three or more deaths and injuries. But the bottom line is always that firearms are used to inflict harm.

In the immediate aftermath of such events, law enforcement agencies and organizations responsible for maintaining the safety of public and private venues all seek ways to predict (and hence, prevent) such events.

These efforts are admirable, but futile.

Our research at the University of Illinois analyzed data on 323 mass killings documented by USA Today from 2006 through 2016 to assess whether discernible patterns exist to predict mass killings events.

The good news is that a model was identified to capture the timing of such events. The bad news is that this model reinforces the observation that such events are randomly occurring phenomena, and that there is no easy way to predict when (and hence, where) the next event will occur.

Our analysis also observed that mass killings occurred at a constant rate over the 2006 through 2016 decade. This observation puts to rest the belief that such events are occurring more frequently over time. Such a view may not be well-received in the shadow of heinous act of violence at San Jose, nor is it any consolation to those affected by the event. This however is what the data are saying.
Mass shootings are now a routine and inextricable feature of American life.

Detecting patterns in these mass killings is a complicated exercise. That’s of little use to members of the general public, who rightly want to know what actions they can take to protect their friends and families from becoming a victim in such an event.

Due to the relatively low rate of public mass shootings nationwide, coupled with the large number of public venues where they can occur, the inclination is to have constant police presence at each potential target. But that’s neither practical nor cost effective. There are also attendant dangers in this approach, as demonstrated by the ongoing national debate over policing in the wake of the killing of George Floyd.

Rather, infrastructure-based interventions — like buildings that can be locked-down to protect inhabitants until law enforcement arrive — are likely to be more cost effective at preventing or interrupting attempted mass shootings.

In addition, making sure law enforcement personnel have the ability to rapidly respond to such events once they become apparent is critical to minimizing the loss of life and damage. This involves enhanced training and communication so that the people who can terminate a mass shooting event before its footprint of destruction grows are capable of taking decisive and effective action.

Broad public education is also critical to create a prepared and informed population at the onset of a mass shooting event.

Regrettably, there is no one solution to mass shootings. Each event has its unique features. It is also easy to confuse association of each event’s factors with causality. The June 2017 shooting in Alexandria, Virginia during a congressional baseball practice, albeit not satisfying the strict criteria for a mass killing, highlights that even in the most controlled environments, with scores of law enforcement personnel present, the potential exists for a mass shooting event to unfold.
The best guard against such situations remains vigilance.

Sheldon Jacobson is a professor of computer science and director of the Simulation and Optimization Laboratory at the University of Illinois at Urbana-Champaign.

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Written By
Sheldon Jacobson

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