

# Can Violent Protest Change Local Policy Support?: A Replication Attempt

Prachi Naik

4/24/2020

## Contents

<b>1</b>	<b>Abstract</b>	<b>1</b>
<b>2</b>	<b>Introduction</b>	<b>2</b>
<b>3</b>	<b>Literature Review</b>	<b>3</b>
3.1	Race Imputations . . . . .	3
3.2	Ecological Inference Model . . . . .	3
<b>4</b>	<b>Paper Review</b>	<b>4</b>
<b>5</b>	<b>Replication</b>	<b>5</b>
<b>6</b>	<b>Extension</b>	<b>5</b>
<b>7</b>	<b>Tables and Figures</b>	<b>6</b>
<b>8</b>	<b>Appendix</b>	<b>6</b>

## 1 Abstract

Enos, Kaufman, and Sands (2019) show that the 1992 Los Angeles Riot— one of the most well-known and documented instances of political violence in recent American history— caused a significant liberal shift in policy support at the polls due to the increased mobilization of Black and White voters, a mobilization that has endured over a decade later. The replication attempted in this project successfully found that White voters demonstrated a 0.028 increase in support for public school funding relative to university funding (CI: [0.018, 0.039]) and Black voters demonstrated a 0.073 increase (CI: [0.066, 0.081]). Using a permutation test, this project sought to confirm these confidence intervals. The findings were consistent. This matters because \_\_\_\_\_.

## 2 Introduction

The first paragraph is a review of the paper you are replicating. Flesh out the details. Tell us about the data and the model. Place it within the relevant literature, via a key citation or two. Highlight implications and caveats. Again, it is hard to summarize a 25 page paper in a paragraph. Do your best. Note that the paper’s own abstract is often a useful guide.

This paper seeks to answer the following fundamental question: what, if any, impact can a violent protest have on changing political behavior? In order to explore this question, Enos, Kaufman, and Sands used a difference-in-differences approach to analyze measures of policy support before and after the 1992 Los Angeles Riot. The Riot was sparked by a series of events that began with the release of a video in which four White police officers were captured violently beating an unarmed black man named Rodney King on March 3, 1991. A little more than a year later, the four officers were subsequently acquitted by an all-White jury. Within hours of the verdict being announced, “a series of violent and destructive incidents occurred around the intersections of Florence Avenue and Normandie Avenue in south central LA, a predominantly African American neighborhood” that would serve as the Riot’s epicenter (???). Though the Riot was a nonrandom event, the authors see the release of the video as exogenously timed in relation to the 1992 election. They were able to manipulate a certain symmetry in the 1990 vs 1992 ballot measures to stand for treatment and control measures. For the treatment, they chose to focus on policy measures concerning k-12 education; for the control, they chose to focus on policy measures concerning University education. The assumptions undergirding this decision will be discussed later on, but most salient here, is that the authors adopt the basic idea that the riot brought the racialized unequal allocation of public goods (k-12 education) to the forefront of voters’ minds and thus impacted the way they voted on increasing educational spending. Analysis was conducted on the individual voter level instead of on the aggregate level in order to differentiate between racial and geographical effects. Using geocoded individual and precinct-level data, the authors were able to measure the effects of the riot on voters at any proximity to its epicenter. The effect of the Riot itself was estimated by “differencing out” the change in support for University funding (which was assumed to remain constant) from the difference in support for k-12 education funding measured via a population-weighted mean of “yes” votes for each of the 4 ballot initiatives under consideration, which the authors refer to as “EdDiff” (???). To further isolate the effect of the riot, the authors also cross-verified the correlation between EdDiff and proximity from the epicenter in order to check for omitted variable bias. The findings that the effect is more pronounced closer to the epicenter supports the authors’ finding that the riot itself (as opposed to merely the beating and trial) was the mechanism behind the main difference-in-differences effect. Using Ecological Inference (EI) methods developed by Gary King, the authors used a combination of precinct-level digitized vote returns from the LA County registrar and UC Census Bureau demographic data to estimate individual voting behavior by racial group (???). They input the demographic proportions of each precinct (what proportion of the precinct is White, African-American, Asian, etc) and the proportion of “yes” votes in each precinct for each of the four ballot initiatives. The difference-in-difference estimator helps answer the following counterfactual: “Among voters in the LA basin, how would support for public schools have changed in the absence of the video, trial, and subsequent riot?” (???). While it’s difficult, if not impossible to disentangle the three events, the authors attempt to isolate the impact of the riot by posing the secondary counterfactual: “How would support for public schools have changed in the LA basin in the absence of the riot, conditional on the beating and trial happening?” (???). This question is answered by the heterogeneous treatment effects by distance from the riot’s epicenter.

The second paragraph provides more details on your replications. Mention that you used R, and provide an citation to R in your bibliography. (See citation(.).) Cite the location from which you got the data and code for your replication. (This might be to the Dataverse, a webpage or “personal communication” with the author.) Provide a footnote with a link to your repo.

The third and fourth paragraphs are more flexible. Indeed, they might be only one paragraph or they might be several. What did you do? What did you find?

The final paragraph is different between the introduction and the conclusion. In the introduction, it may not even exist! (We don’t want to be overly didactic here. There are many ways to write a great paper.) Or it may just provide a roadmap to the rest of the paper. In the conclusion, the last paragraph is where you

get to speculate: What does it all mean? What should we research next?

### 3 Literature Review

After the introduction, you will have a literature review, not dissimilar from the one in the paper you are replicating. (You do not get to assume that we have read the paper you are replicating. We haven't. So, if something is worth understanding about the literature, then you need to tell us, and in your own words.) You also need to closely review any relevant literature that has come out since the paper was published. (We will take off points if a simple Google scholar search brings up a relevant article which you should have mentioned.) Of course, if a lot of time has passed and/or this is a particularly active area of research, there may be dozens of relevant articles. You can't review them all. Pick the most important ones, especially those written by the same authors and/or using the same data and/or performing an analysis similar to your own extension.

#### 3.1 Race Imputations

Don't throw away the uncertainty of the race! Maintain the probability. doing causal inference on corrupt data according to Rahul. – focus on figure 1: data hidden for what percentage of white voters voted liberal.

#### 3.2 Ecological Inference Model

The authors use an ecological inference (EI) model to distill precinct-level voting data down to a racialized individual level. imputation algorithm hidden in appendix b.

There are three core assumptions undergirding an EI model: "(1) parameter variation is characterized by a truncated bivariate normal distribution; (2) that the parameters are uncorrelated with the regressors; and (3) there is no spatial autocorrelation.

The first assumption is satisfied, given that there IS spatial autocorrelation (this is what it means: The term 'spatial autocorrelation' is highly suggestive of its meaning: 'auto' as in 'self'; 'correlation' as in the statistical use of that term to measure a 'relationship' – hence a measure of the relationship between the value of a variable at a location and the same variable but at another location separated by some specified distance (or, in the case of type (3) variables, some measure of 'lag' separation between areas). Positive spatial autocorrelation is the tendency for sites or areas separated by a specified distance or 'lag' to have similar values of the variable (i.e., both values are high or both are low).(???) According to the authors, even when the third assumption is violated, they say the model performs "exceedingly well." Though they refer to other literature (Cho, 1998) to validate this point, this is still cause for concern. A violation of any key assumption seems to be a problem, even though the authors concern themselves more with maintenance of the second assumption– that the parameters are uncorrelated with regressors. The authors interpret that as meaning "no aggregation bias." Aggregation bias leads to the "ecological fallacy" — the conclusion that what is true for the group must be true for the sub-group or individual. The authors interpret this as referring to the fact that voters of a particular race living in neighborhoods where they are the majority would support public schools at the same or similar rate to voters of that same race in a more heterogeneous neighborhood (???). They believe this is a relatively safe assumption for African American voters (borne out by the fact that African Americans in the LA Basin registered as Democrats 95% of the time), but less so for White voters. Previous research (Enos, 2017) suggests that Whites in heterogeneous precincts are more liberal than Whites in homogeneously White neighborhoods, due to the residential sorting or the effects of segregation on voting (???). In order to address this, the authors apply a weighting system suggested by King (1997 b) in which they apply a weight to each precinct that is inversely proportional to the size of the ecological inference standard error. They present both weighted and unweighted difference-in-differences results, which are remarkably similar in magnitude: " The weighted average value of the difference-in-differences estimate for whites is 0.029, and for African Americans, it is 0.071. The unweighted value for whites and for African

Americans are 0.028 and 0.076, respectively" (???). We are to assume that the confidence intervals are similar in the unweighted values.

– changes in policy support by distance from the riot: (Because the salience of an event often varies with a subject's proximity to that event (Latane' 1981), if changes in policy support were caused by the riot, then we would expect these changes to be correlated with distance from the riot.) "Furthermore, as shown below, our estimates exhibit a spatial pattern that is consistent with a distinct effect of the riot itself, rather than amore general media effect. We also do not see changes in policy support in other parts of California that, while exposed to the beating and trial through media, were not proximate to the riot. Therefore, we believe that the effects we measure are likely attributable to the riot itself, not other associated events (???).

## 4 Paper Review

Directions: This can be its own section or it can be folded into the literature review. In the abstract, you gave a one sentence summary of the original paper. In the introduction (and conclusion), you gave (different!) one paragraph summaries of that paper. Here you provide a summary in whatever level of detail you think is appropriate. This section could also be folded into the replication section discussed below. But, wherever you put, you must have a one or two page summary of the original paper, highlighting all the details most relevant to your replication efforts and/or to your extension.

Start of my summary: This paper seeks to answer a longstanding question in political science: though violent protests are undoubtedly eye-catching and dramatic, do they actually have an effect on political behavior? Focusing on the 1992 LA "Race Riots" (also commonly called the "Rodney King Riots"), one of the most high profile events of political violence in recent years, Enos and his colleagues found that the riot caused a significant liberal shift in policy support at the polls for issues said to have motivated the riots themselves. For the purposes of their inquiry, the authors defined these issues generally as the racialized (mis)allocation of public goods, within which support for education emerged as the ballot referenda of interest. To estimate the effect of the riot, the authors measured the difference in support for ballot initiatives focused on k-12 education (thought to be closely associated with African Americans) against the difference in support for ballot initiatives focused on university funding (less associated with African Americans) in the June 1990 election and the June 1992 election. By "effect of the riot," authors are referring to a "bundled treatment" encapsulating the effect of a riot through various channels such as media coverage, interpersonal experiences of trauma or psychological effects, public statements by politicians, and changing propoerty values, to name a few (???). Support for other university-level education policies were not considered "public goods"

Throughout the paper, the researchers use geocoded data analysis to investigate the source of this shift and trace it back to the mobilization of African American and Liberal White voters following the LA Riots. The "policy shifts" referenced here are actually local shifts in referendum voting on public goods targeted at urban dwelling racial minorities after the 1992 riots. These policies were put on the ballot before the riots erupted. Though the riot itself was a nonrandom event, the release of the video of police officers brutalizing an unarmed Black man (Rodney King) that ultimately triggered the riot was considered by the researchers to be unrelated to the election timeline. The researchers conducted a difference-in-difference analysis of pre and post riot policy voting to control for secular trends in policy support. They further explored the validity of this causal claim by examining the spatial correlation between how much support for a certain policy changed based on how far from the epicenter of those voters were. Ultimately, they found that the closer voters were to the epicenter of the riots, the more likely they were to vote for policies that provided liberal relief to minority urban communities.

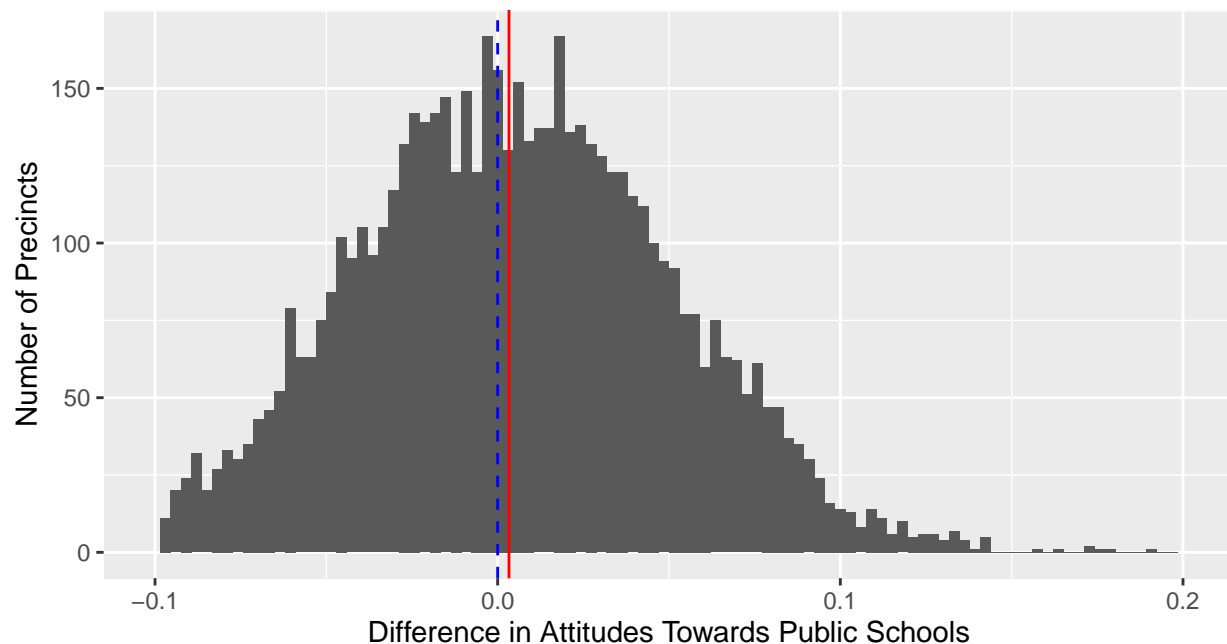
The authors rely on a single theoretical assumption to guide their study, which requires closer scrutiny. They believe that increased support for public school funding over university funding is evidence of a liberal shift in political behavior. They arrive at this assumption after a series of complicated logical leaps. First they stipulate that rioting is a political act demanding redress for political grievances. Next, they draw on scholarly interpretations of the 1992 LA riots as "collective action against poor economic and social conditions, triggered by police brutality." To bolster this point, they offer the statistic that "67.5% of African Americans in LA County viewed the riots as a protest against unfair conditions" (???). This is potentially

problematic for two reasons— first, it assumes a monolithic view of the African-American community, which runs counter to the work the authors do later in the ecological inference weighting process to de-bias the supposed liberalism of Black voters in LA; and second, it offers no such evidence to suggest that White voters viewed the riot in this same light, yet White voters are a key subset of the population studied. Finally, continuing with the authors’ logic, they suggest that support for spending on public goods is “associated with African-Americans and racial minorities generally and is often implicated in the social welfare demands of riot participants” (???). On the other hand, the authors offer that “attitudes about university spending are, at most, weakly linked to attitudes about African Americans and that funding higher education would not as widely be seen as a method of addressing problems made apparent by the riot” (???). This is some of the paper’s most vague reasoning unsupported by empirical evidence, and yet, the entire crux of the finding that violent protest does, indeed, mobilize voters to liberally shift their political views rests on this essential juxtaposition of the needs of African Americans with public school funding and not university

## 5 Replication

### Difference in Differences for All Voters: Some Evidence that the Riot Influenced Political Opinions

The change in support for public schools across precincts between 1990 and 1992,  
net the change in support for universities



Data Source: Ryan Enos from Harvard Dataverse

## 6 Extension

For my extension, I plan to conduct a permutation test as a quantitative evaluation of the hypothesis that there is a difference in effect for Black vs White voters using the fewest possible assumptions about underlying distributions. King et al also recommend this approach of using statistical simulation to capture a more holistic and realistic picture of uncertainty (???).

## 7 Tables and Figures

Forthcoming

## 8 Appendix