Enos 2016: Replication and Extension

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Abstract

What the Demolition of Public Housing Teaches Us about the Impact of Racial Threat on Political Behavior

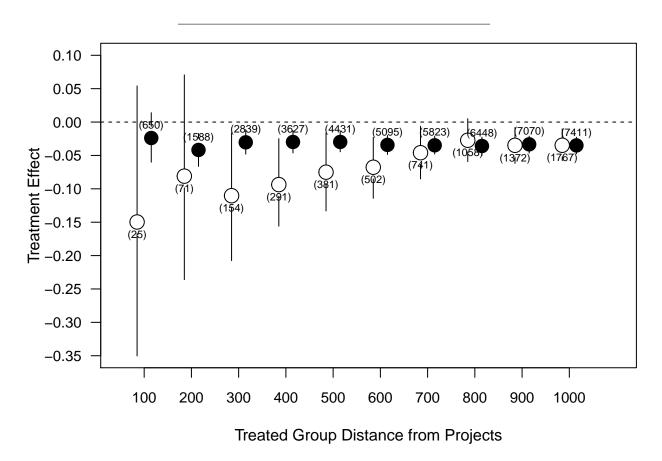
I replicate the figures in Enos (2016), "What the Demolition of Public Housing Teaches Us about the Impact of Racial Threat on Political Behavior," the data for which can be found on the Harvard Dataverse (Enos 2014).¹

The figures appear exactly as in the original. They show the "treatment" effect of the quasi-experimental demolishing of housing projects in Chicago on the voting behavior of the nearby white population. Overall, the figures underscore the paper's argument that white individuals living closer to the projects, or those living in an area where most of the neighborhood's black population was living in a demolished project, voted less after the projects came down. Enos argues that this is empirical evidence for the "racial threat" hypothesis.

The extension attempts to depict the key finding of the paper in a more visually compelling way. Using the mean treatment effects for four different categories of individuals, I illustrate that the white treatment groups show decreased voting turnout at closer distances than black treatment groups.

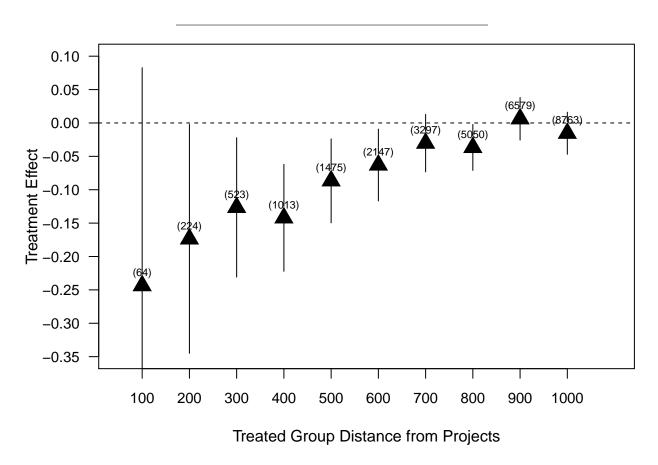
 $^{^{1}}$ Note that to knit this document, you must change your working directory in line 785 of the code to read in the large CSV file of main results.

Figure 1 Treatment Effects



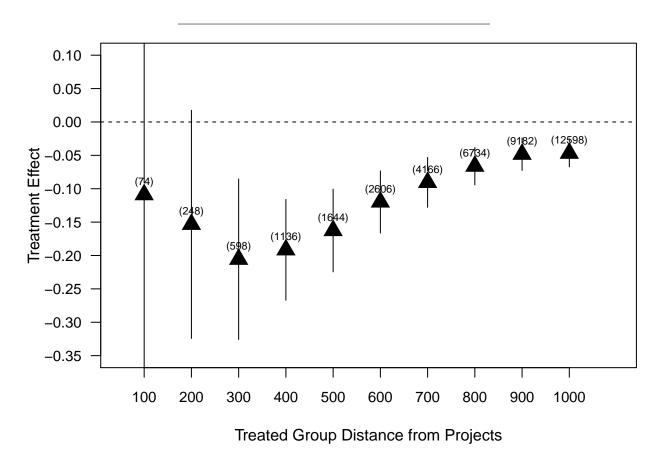
Note: Difference-in-differences results for treatment groups defined by increasing distance from the demolished projects. Differences are for the mean turnout in 2004 minus the mean turnout in 2000 for the treatment group minus the same difference for the control group. White circles represent the mean effect on white voters; black circles represent the mean effect on black voters. The N in each treatment group is in parentheses next to the mean effect. Vertical lines represent the 95% confidence intervals generated by bootstrapped standard errors of the difference between treatment and control.

Figure 2 Treatment Effects Using Matched White Voters Near Nondemolished Projects for Control Group



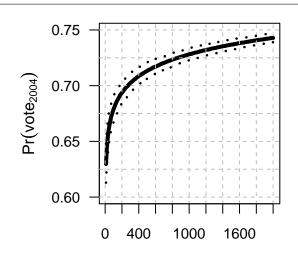
Note: Coefficients on treatment as defined by increasing distance from the demolished projects from OLS regressions on change in turnout from 2000 to 2004 (triangles). N for the regression using matched groups is next to the point representing the coefficient. The treatment group is matched to a control group of white voters living near projects that were not demolished, using nearest neighbor matching. Regressions include variables used in matching as controls. Vertical lines represent the 95% confidence intervals generated by bootstrapped standard errors on the treatment coefficient.

Figure 3 Treatment Effects Using Matched Black Control Group and Controlling for Homeownership

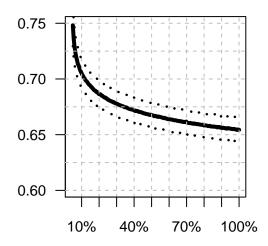


Note: Coefficients on treatment as defined by increasing distance from the demolished projects from OLS regressions on change in turnout from 2004 to 2000 (triangles). N for the regression using matched groups is next to the point representing the coefficient. The white treatment group is matched to a black control group of the same N using nearest neighbor matching and including variables on homeownership and home value. Regressions include variables used in matching as controls. Vertical lines represent the 95% confidence intervals generated by bootstrapped standard errors on the treatment coefficient.

Figure 4 Effects of Distance and Size of Projects



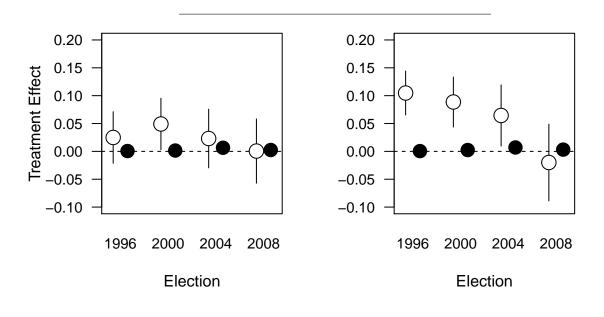
Distance from Project



Percent of Local Black Population in Demolished Project

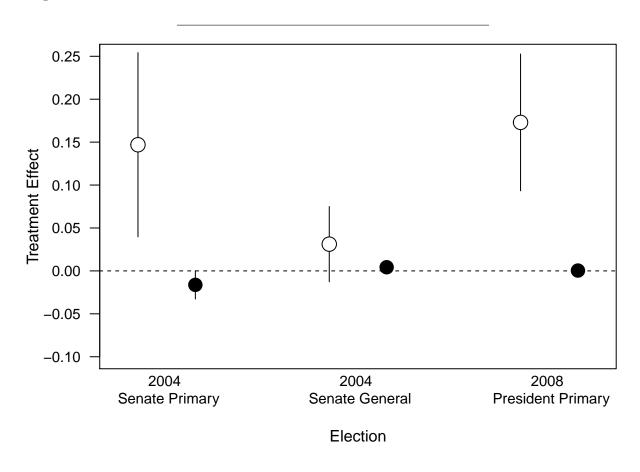
Note: Predicted effects generated from $vote_{2004} = \beta_0 + \beta_1(log(distance)) + \beta_2(log(localpercent)) + vote_{2000}$, with white voters. Figure 4(a) is the predicted probability that a person who voted in 2000 will vote in 2004 with increasing distance, while holding size at its mean. Figure 4(b) is the predicted probability that a person who voted in 2000 will vote in 2004, with increasing outgroup population size, with distance = 100. Dotted lines represent 95% confidence intervals generated by bootstrapped standard errors.

Figure 5



Note: Figure 5(a) shows differences in weighted mean Republican vote for precincts with $d \geq 1{,}000$ and matched precincts with $d > 1{,}000$ for white voters (white circles) and black voters (black circles). Figure 5(b) shows differences in weighted mean Republican vote for white voters and black voters matched with precincts with d $\leq 1{,}000$ from nondemolished projects.

Figure 6



Note: Differences in weighted mean Obama vote for precincts with $d \le 1{,}000$ for demolished projects and matched precincts with $d \le 1{,}000$ for nondemolished projects for white voters (white circles) and black voters (black circles).

Table 1 Regression of Turnout on Distance and Population Size

Table 1: Regression of Turnout on Distance and Population Size

	${ m vote 2004}$
log(demo.distance)	0.021***
,	(0.001)
$\log(\text{context_black})$	-0.018^{***}
	(0.002)
vote2000	0.420***
	(0.003)
Constant	0.136***
N	(0.012)
N	113851
R-squared	0.119
Adj. R-squared	0.119
Residual Std. Error	0.429 (df = 113847)
F Statistic	$5134.152^{***} (df = 3; 113847)$
Residual Std. Error	0.429 (df = 113847)

^{***}p < .01; **p < .05; *p < .1

Notes: OLS regression of 2004 voter turnout on listed variables for white voters. The local African American population is represented by the total number of African Americans within 1 kilometer of the project. The population of the housing projects is represented by the African American population of the census blocks containing the projects. The percent of the local African American population living in the demolished projects is these two quantities expressed as a proportion. Standard errors are listed in parentheses. All coefficients are significant at p < .0001.

Extension

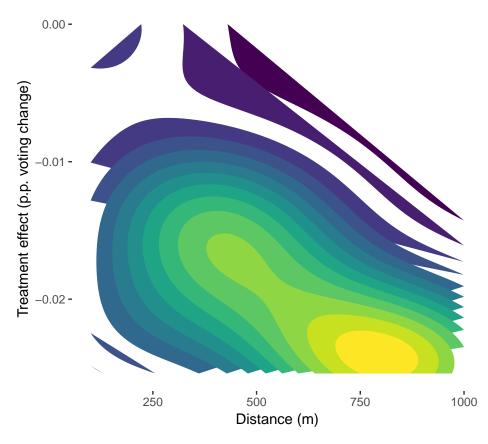
This extension attempts to depict the key finding of the paper in a more visually compelling way. Using the mean treatment effects for four different categories of individuals, I illustrate that the white treatment groups show decreased voting turnout at closer distances than black treatment groups.

The four categories are:

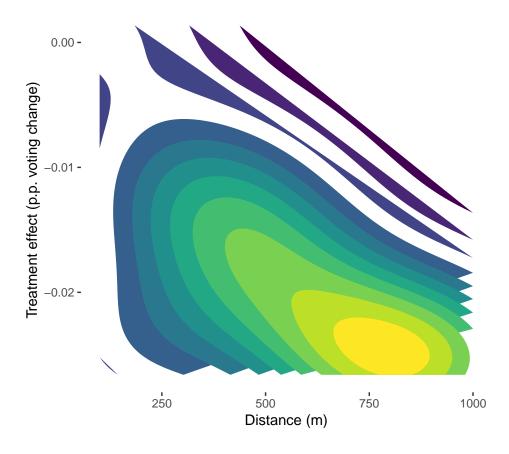
- Black individuals (with 91 percent confidence, based on Enos's replication data)
- Black individuals (with 99 percent confidence)
- White individuals (91)
- White individuals (99)

Note that yellow in the charts below represents higher density.

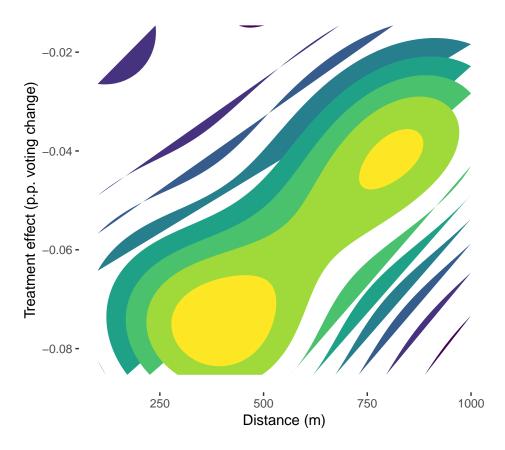
Black residents decrease turnout at higher distances. Black with 99 percent confidence.



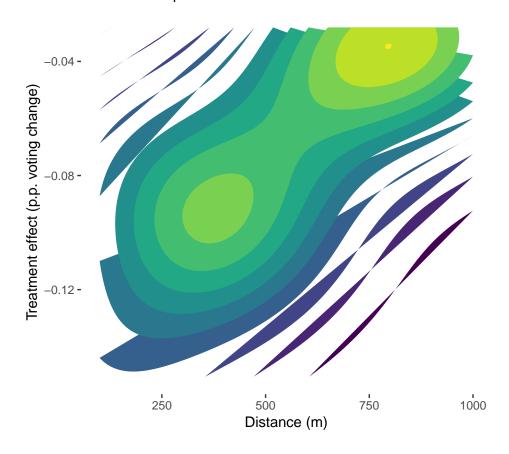
Black residents decrease turnout at higher distances. Black with 99 percent confidence.



White residents decrease turnout at closer distances. White with 91 percent confidence.



White residents decrease turnout at closer distances. White with 99 percent confidence.



References

Enos, Ryan D. 2014. "Replication data for: What the Demolition of Public Housing Teaches Us About the Impact of Racial Threat on Political Behavior." Harvard Dataverse. doi:10.7910/DVN/26612.

——. 2016. "What the Demolition of Public Housing Teaches Us About the Impact of Racial Threat on Political Behavior." *American Journal of Political Science* 60 (1). Wiley: 123–42. doi:10.1111/ajps.12156.