

Supplementary Information for “Reexamining the Effect of Mass Shootings on Public Support for Gun Control”

David J. Barney
dbarney@polsci.umass.edu

Brian F. Schaffner
b.f.schaffner@gmail.com

June 21, 2018

Contents

1	Treated and Untreated N in Each Analysis	2
2	Treatments Conditional on Previous Exposure	3
3	Treatments Conditional on Party ID	5
4	Treatments with Continuous Indicators	7
5	Lists of Additional Shootings	8

1 Treated and Untreated N in Each Analysis

Table SI.1: 2-Year Subset of 2010–2012–2014 Panel, Comparison of N Identified by Newman and Hartman vs Barney and Schaffner

	Newman & Hartman	Barney & Schaffner	Barney & Schaffner, Decade Prior
Untreated N	7985	6002	3563
Treated N	559	2536	4975
Total N	8544	8538	8538

Note: Respondents limited to those who did not move between the 2010 and 2012 waves of the 2010–2012–2014 CCES Panel Study. Barney & Schaffner treatment indicators include six fewer N because Newman & Hartman’s replication dataset lacks longitude and latitude geocoding for 30 respondents, resulting in missing distances for six respondents that did not change ZIP codes between survey waves. Newman and Hartman code these as untreated but we leave them as missing.

Table SI.2: Full 2010–2012 Panel, N by Treatment Threshold

	≤ 10 Miles	≤ 25 Miles	≤ 50 Miles	≤ 75 Miles	≤ 100 Miles	Media Market
<i>2012 Wave</i>						
Untreated N	16214	15188	14093	12997	11868	14037
Treated N	611	1637	2732	3828	4957	2788
Total N	16825	16825	16825	16825	16825	16825

Note: Respondents limited to those who did not move between the 2010 and 2012 waves of the 2010–2012 CCES Panel Study.

Table SI.3: 2010–2012–2014 Panel, N by Treatment Threshold

	≤ 10 Miles	≤ 25 Miles	≤ 50 Miles	≤ 75 Miles	≤ 100 Miles	Media Market
<i>2012 Wave</i>						
Untreated N	7662	7164	6661	6114	5595	7216
Treated N	282	780	1283	1830	2349	728
<i>2014 Wave</i>						
Untreated N	7516	6759	6002	5124	4404	6772
Treated N	428	1185	1942	2820	3540	1172
Total N	7944	7944	7944	7944	7944	7944

Note: Respondents limited to those who did not move between the 2010, 2012, and 2014 waves of the 2010–2012–2014 CCES Panel Study.

2 Treatments Conditional on Previous Exposure

Table SI.4: 2010–2012 Panel, Fixed Effects Regressions, Treatment Conditional on Previous Exposure to Shooting

	≤ 10 Miles	≤ 25 Miles	≤ 50 Miles	≤ 75 Miles	≤ 100 Miles	Media Market
Year, 2012	0.0265*** (0.00205)	0.0266*** (0.00212)	0.0258*** (0.00220)	0.0262*** (0.00229)	0.0265*** (0.00240)	0.0253*** (0.00220)
Murders per Capita	-0.0742 (0.0408)	-0.0745 (0.0408)	-0.0753 (0.0408)	-0.0754 (0.0408)	-0.0744 (0.0408)	-0.0792 (0.0408)
Treatment, Previously Untreated	0.0103 (0.0118)	0.00466 (0.00819)	0.0107 (0.00821)	0.0168* (0.00768)	0.00581 (0.00806)	0.0350*** (0.0098)
Treatment, Previously Treated	-0.0190 (0.0239)	-0.00477 (0.0109)	0.00185 (0.00668)	-0.00481 (0.00555)	-0.000973 (0.00480)	-0.00129 (0.00608)
Constant	0.604*** (0.00360)	0.604*** (0.00360)	0.604*** (0.00360)	0.604*** (0.00360)	0.604*** (0.00360)	0.604*** (0.00360)
Group N	16825	16825	16825	16825	16825	16825

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: For the distance threshold indicators, previous exposure to treatment was identified by calculating a respondent's distance in 2010 from 39 shootings listed in the Stanford MSA database occurring between 2000 and the beginning of the 2010 CCES Panel Study; previous exposures to shootings are calculated at a distance threshold corresponding with that of the treatment in each model. For the media market indicators, previous exposure to treatment was identified by coding the media markets corresponding with the 39 shootings listed in the Stanford MSA database occurring between 2000 and the beginning of the 2010 CCES Panel Study.

Table SI.5: 2010–2012–2014 Panel, Fixed Effects Regressions, Treatment Conditional on Previous Exposure to Shooting

	≤ 10 Miles	≤ 25 Miles	≤ 50 Miles	≤ 75 Miles	≤ 100 Miles	Media Market
Year, 2012	0.0285*** (0.00289)	0.0280*** (0.00293)	0.0281*** (0.00299)	0.0304*** (0.00304)	0.0306*** (0.00312)	0.0284*** (0.00293)
Year, 2014	0.0292*** (0.00347)	0.0283*** (0.00354)	0.0285*** (0.00363)	0.0317*** (0.00374)	0.0321*** (0.00388)	0.0288*** (0.00355)
Murders per Capita	-0.00235 (0.0371)	-0.00287 (0.0372)	-0.00502 (0.0372)	-0.00510 (0.0371)	-0.00584 (0.0372)	-0.00360 (0.0372)
Treatment, Previously Untreated	0.0193 (0.0101)	0.00894 (0.00708)	0.00214 (0.00644)	-0.00243 (0.00602)	-0.00668 (0.00683)	0.010274 (0.01115)
Treatment, Previously Treated	-0.00146 (0.0174)	0.0132 (0.00962)	0.00761 (0.00659)	-0.00743 (0.00527)	-0.00500 (0.00452)	0.00533 (0.00705)
Constant	0.616*** (0.00362)	0.616*** (0.00362)	0.617*** (0.00362)	0.617*** (0.00362)	0.617*** (0.00362)	0.616*** (0.00362)
Group N	7944	7944	7944	7944	7944	7944

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: For the distance threshold indicators, previous exposure to treatment was identified by calculating a respondent's distance in 2010 from 39 shootings listed in the Stanford MSA database occurring between 2000 and the beginning of the 2010 CCES Panel Study; previous exposures to shootings are calculated at a distance threshold corresponding with that of the treatment in each model. For the media market indicators, previous exposure to treatment was identified by coding the media markets corresponding with the 39 shootings listed in the Stanford MSA database occurring between 2000 and the beginning of the 2010 CCES Panel Study.

3 Treatments Conditional on Party ID

Table SI.6: 2010–2012 Panel, Fixed Effects Regressions, Treatment Conditional on Party ID

	≤ 10 Miles	≤ 25 Miles	≤ 50 Miles	≤ 75 Miles	≤ 100 Miles	Media Market
Year, 2012	0.0265*** (0.00205)	0.0266*** (0.00212)	0.0258*** (0.00220)	0.0262*** (0.00229)	0.0265*** (0.00240)	0.0253*** (0.00221)
Murders per Capita	-0.0735 (0.0408)	-0.0744 (0.0408)	-0.0748 (0.0408)	-0.0749 (0.0408)	-0.0746 (0.0409)	-0.0762 (0.0408)
Treatment, Democrat	0.0104 (0.0145)	0.0216* (0.00928)	0.0155* (0.00736)	0.0139* (0.00634)	0.0114 (0.00584)	0.0202** (0.00731)
Treatment, Independent	-0.0117 (0.0325)	-0.00577 (0.0203)	0.000783 (0.0156)	-0.00513 (0.0132)	-0.00689 (0.0115)	0.00666 (0.0156)
Treatment, Republican	0.00400 (0.0174)	-0.0218* (0.0103)	-0.00567 (0.00810)	-0.0101 (0.00700)	-0.00970 (0.00615)	-0.00471 (0.00800)
Constant	0.604*** (0.00361)	0.604*** (0.00361)	0.604*** (0.00361)	0.604*** (0.00361)	0.604*** (0.00361)	0.604*** (0.00361)
Group N	16755	16755	16755	16755	16755	16755

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table SI.7: 2010–2012–2014 Panel, Fixed Effects Regressions, Treatment Conditional on Party ID

	≤ 10 Miles	≤ 25 Miles	≤ 50 Miles	≤ 75 Miles	≤ 100 Miles	Media Market
Year, 2012	0.0287*** (0.00290)	0.0280*** (0.00293)	0.0280*** (0.00298)	0.0302*** (0.00303)	0.0305*** (0.00311)	0.0286*** (0.00293)
Year, 2014	0.0292*** (0.00347)	0.0285*** (0.00354)	0.0288*** (0.00362)	0.0320*** (0.00374)	0.0325*** (0.00388)	0.0288*** (0.00355)
Murders per Capita	-0.00271 (0.0372)	-0.00142 (0.0371)	-0.00295 (0.0371)	-0.00279 (0.0371)	0.000652 (0.0371)	-0.00423 (0.0371)
Treatment, Democrat	0.0318** (0.0120)	0.0352*** (0.00810)	0.0324*** (0.00665)	0.0170** (0.00559)	0.0176*** (0.00530)	0.0263** (0.00850)
Treatment, Independent	-0.00743 (0.0274)	0.0106 (0.0173)	-0.00699 (0.0137)	-0.0128 (0.0117)	-0.0104 (0.0107)	-0.00141 (0.0206)
Treatment, Republican	-0.00544 (0.0143)	-0.0197* (0.00894)	-0.0239*** (0.00708)	-0.0316*** (0.00619)	-0.0311*** (0.00569)	-0.0132 (0.00896)
Constant	0.616*** (0.00362)	0.616*** (0.00362)	0.616*** (0.00362)	0.616*** (0.00362)	0.616*** (0.00362)	0.616*** (0.00362)
Group N	7925	7925	7925	7925	7925	7925

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4 Treatments with Continuous Indicators

Table SI.8: 2010–2012 Panel, Fixed Effects Regressions, Continuous Distances as Treatments

	Linear Distance	$\ln(\text{Distance})$
Year, 2012	0.0128*** (0.00116)	0.0126*** (0.00115)
Murders per Capita	-0.0762 (0.0408)	-0.0762 (0.0408)
Distance	-0.0000151 (0.0000147)	-0.00305 (0.00216)
Constant	-25.04*** (2.330)	-24.63*** (2.319)
Group N	16825	16825

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: The initial distance in 2010 (the pre-treatment wave) is set at the distance to the closest mass shooting occurring in the 2 years prior to the panel study. Distance to a mass shooting in 2012 is only updated from this baseline if the shooting occurred in a closer proximity to the respondent.

Table SI.9: 2010–2012–2014 Panel, Fixed Effects Regressions, Continuous Distances as Treatments

	Linear Distance	$\ln(\text{Distance})$
Year, 2012	0.0294*** (0.00318)	0.0286*** (0.00306)
Year, 2014	0.0302*** (0.00370)	0.0292*** (0.00365)
Murders per Capita	-0.00527 (0.0371)	-0.00454 (0.0371)
Distance	0.00000592 (0.0000181)	-0.000920 (0.00212)
Constant	0.615*** (0.00505)	0.621*** (0.0109)
Group N	7944	7944

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: The initial distance in 2010 (the pre-treatment wave) is set at the distance to the closest mass shooting occurring in the 2 years prior to the panel study. Distances to a mass shooting in 2012 and 2014 are only updated from this baseline if the shooting occurred in a closer proximity to the respondent.

5 Lists of Additional Shootings

Table SI.10: Shootings Occurring Between 2012 and 2014 Panel Waves

Event Name	City	State	Date
Azana Spa in Brookfield	Brookfield	Wisconsin	10/21/12
Clackamas Town Center	Happy Valley	Oregon	12/11/12
Sandy Hook Elementary School	Newtown	Connecticut	12/14/12
South Valley Residence	Albuquerque	New Mexico	1/19/13
Phoenix Law Firm	Phoenix	Arizona	1/30/13
Los Angeles Police Department	Irvine	California	2/3/13
Ladera Ranch, Santa Ana, Tustin and Orange	Ladera Ranch	California	2/19/13
Mohawk and Herkimer Villages in New York	Mohawk	New York	3/13/13
Pinewood Village Apartments	Federal Way	Washington	4/21/13
Village of Manchester in Illinois	Manchester	Illinois	4/24/13
Santa Monica College	Santa Monica	California	6/7/13
Hialeah Apartments	Hialeah	Florida	7/26/13
Ross Township Supervisor Council Meeting	Salisbury	Pennsylvania	8/5/13
Homes in Desoto and Dallas	Dallas	Texas	8/7/13
Oklahoma City Residence	Oklahoma City	Oklahoma	8/14/13
Washington Navy Yard	Washington	District of Columbia	9/16/13
Sparks Middle School	Sparks	Nevada	10/21/13
Los Angeles International Airport (LAX)	Los Angeles	California	11/1/13
Centennial Hill Bar & Grill	Montgomery	Alabama	12/28/13
Cedarville Rancheria Tribe	Alturas	California	2/20/14
San Francisco Tenderloin	San Francisco	California	3/23/14
Fort Hood	Killeen	Texas	4/2/14
Kennesaw FedEx	Kennesaw	Georgia	4/29/14
Isla Vista	Isla Vista	California	5/23/14
Seattle Pacific University	Seattle	Washington	6/5/14
Nellis Plaza	Las Vegas	Nevada	6/8/14
Bourbon Street New Orleans	New Orleans	Louisiana	6/29/14
Albuquerque Auto Shop	Albuquerque	New Mexico	8/8/14

Source: Stanford Mass Shootings in America Database. The Azana Spa shooting occurred while the 2012 wave was in the field; however, since it happened after most of the interviews for that wave had been completed, we include it as an intervention between 2012 and 2014.

Table SI.11: Shootings Occurring in Decade Prior to CCES Panel Study

Event Name	City	State	Date
Edgewater Technology	Boston	Massachusetts	12/26/00
Navistar International	Melrose Park	Illinois	2/5/01
Santana High School	San Diego	California	3/5/01
Appalachian School of Law	Grundy	Virginia	1/16/02
University of Arizona College of Nursing	Tucson	Arizona	10/28/02
Case Western Reserve University	Cleveland	Ohio	5/9/03
Lockheed Martin	Meridian	Mississippi	7/8/03
Windy City Core Supply Warehouse	Chicago	Illinois	8/27/03
Birchwood, Wisconsin	Birchwood	Wisconsin	11/21/04
Damageplan show at the Alrosa Villa Nightclub	Columbus	Ohio	12/8/04
Tyler Courthouse	Tyler	Texas	2/24/05
Living Church of God	Brookfield	Wisconsin	3/12/05
Party in Capitol Hill, Seattle	Seattle	Washington	3/25/06
Essex Elementary School	Essex Junction	Vermont	8/24/06
Orange High School	Hillsborough	North Carolina	8/30/06
Duquesne University	Pittsburgh	Pennsylvania	9/17/06
West Nickel Mines Amish School	Lancaster	Pennsylvania	10/2/06
Trolley Square	Salt Lake City	Utah	2/12/07
Springwater Trail High School	Gresham	Oregon	4/10/07
Virginia Tech Campus	Blacksburg	Virginia	4/16/07
Apartment in Crandon, Wisconsin	Crandon	Wisconsin	10/7/07
SuccessTech Academy	Cleveland	Ohio	10/11/07
South Middle School Football Game	Saginaw	Michigan	10/25/07
Westroads Mall	Omaha	Nebraska	12/5/07
Mojave High School Bus	Las Vegas	Nevada	12/11/07
Carnation, Washington	Carnation	Washington	12/24/07
Kirkwood City Hall	Kirkwood	Missouri	2/7/08
Northern Illinois University	DeKalb	Illinois	2/14/08
Atlantis Plastics	Henderson	Kentucky	6/25/08
South Mountain Community College	Phoenix	Arizona	7/24/08
University of Central Arkansas	Conway	Arkansas	10/26/08
Covina, California	Covina	California	12/24/08
Rivermark, Santa Clara, California	Santa Clara	California	3/29/09
Pinelake Health and Rehab nursing home	Carthage	North Carolina	3/29/09
Immigration Services Center in Binghamton	Binghamton	New York	4/3/09
Fort Hood Army Base	Fort Hood	Texas	11/5/09
Parkland Coffee Shop	Lakewood	Washington	11/29/09
University of Alabama in Huntsville	Huntsville	Alabama	2/12/10
Hartford Beer Distributors	Manchester	Connecticut	8/3/10

Source: Stanford Mass Shootings in America Database.