

MAPPING URBAN-RURAL POLARIZATION TO PLACE-BASED RESENTMENTS

Polarization along America's rural-urban divide has intensified considerably in recent years as rural and small-town voters shift right while urban and suburban voters shift left [1]. Political scientists have theorized this rural-urban polarization will make America's democracy vulnerable [2], especially insofar as it induces hostility and resentment between geographic groups who are becoming increasingly well-sorted along partisan lines [3;4]. Concerningly, place-based resentments have become quite prevalent in the US—especially among rural Americans towards urbanites [5;6]. But while recent research links rural-urban polarization with place-based resentments and shows they concomitantly increase, no study has directly tested whether rural-urban polarization *causes* place-based resentments.

In this experiment, I will test whether exposure to geographic polarization induces place-based resentments among partisans. Respondents will be assigned to one of two conditions. In the treatment condition, respondents will be shown a map of the 2020 presidential election results by county with a vignette explaining the election outcome and the rural-urban political divide. Notably, this type of election map was widely-circulated online and in the media following the 2016 and 2020 elections and reflects a realistic exposure to America's rural-urban divide. In the placebo condition, respondents will be shown a map of the 2020 election by state with a vignette explaining the election outcome, but not highlighting rural-urban divides. This placebo will address the effect of priming elections to isolate the effect of rural-urban polarization, specifically, on place-based resentments.

I will use a quasi-pre-post design [7]. Respondents will complete two place-based resentment items pre-treatment and four post-treatment. The items are modified versions of those developed by Munis (2020) and Trujillo and Crowley (2022), and will be used to create place-based resentment scales ranging 0 (pro-urban) to 1 (pro-rural). I will regress post-treatment resentment on a treatment dummy and pre-treatment resentment separately for Democrats and Republicans (including partisan-leaning independents). Following the literature linking rural-urban polarization to place-based resentments [3;8], I hypothesize that exposure to rural-urban polarization will (1) increase pro-rural/anti-urban sentiments among Republicans and (2) decrease pro-rural/anti-urban sentiments among Democrats.

My analyses will include partisans from all geographies. For example, I expect the treatment to increase anti-urban resentment among non-rural and rural Republicans alike, so I will not subset to rural Republicans. Recent work finds many Americans identify with geographic groups they do not currently reside in [9], and that non-rural Republicans exhibit high levels of rural consciousness [10]; my findings could help explain these phenomena if I find that rural-urban polarization causes partisans to feel place-based resentment towards geographic groups that generally support their outparty.

My proposed study will be the first to test whether rural-urban polarization causes place-based resentment. If borne out in line with my expectations, this study will provide direct support for a commonly implied, but rarely tested hypothesis: that rural-urban polarization increases place-based resentment towards geographic groups associated with political outgroups. Alternatively, if I do not find support for my hypotheses, this study will be equally valuable in showing the theorized link between geographic polarization and place-based resentments is not as clear as is often suggested.

References: [1] Scala, Dante J., and Kenneth M. Johnson. 2017. "Political Polarization along the Rural-Urban Continuum? The Geography of the Presidential Vote, 2000–2016." *The ANNALS of the American Academy of Political and Social Science* 672 (1): 162–84. [2] Mettler, Suzanne, and Trevor Brown. 2022. "The Growing Rural-Urban Political Divide and Democratic Vulnerability." *The ANNALS of the American Academy of Political and Social Science* 699 (1): 130–42. [3] Brown, Trevor, Suzanne Mettler, and Samantha Puzzi. 2021. "When Rural and Urban Become 'Us' versus 'Them': How a Growing Divide Is Reshaping American Politics." *The Forum* 19 (3): 365–93. [4] Mason, Lilliana. 2018. *Uncivil Agreement: How Politics Became Our Identity*. The University of Chicago Press. [5] Cramer, Katherine J. 2016. *The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker*. The University of Chicago Press. [6] Munis, B. Kal. 2020. "Us Over Here Versus Them Over There...Literally: Measuring Place Resentment in American Politics." *Political Behavior*. [7] Clifford, Scott, Geoffrey Sheagley, and Spencer Piston. 2021. "Increasing Precision without Altering Treatment Effects: Repeated Measures Designs in Survey Experiments." *American Political Science Review* 115 (3): 1048–65. [8] Jacobs, Nicholas, and B. Kal Munis. 2022. "Place-Based Resentment in Contemporary U.S. Elections: The Individual Sources of America's Urban-Rural Divide." *Political Research Quarterly*. [9] Trujillo, Kristin Lunz. 2022. "Feeling Out of Place: Who Are the Non-Rural Rural Identifiers, and Are They Unique Politically?" September. [10] Trujillo, Kristin Lunz, and Zack Crowley. 2022. "Symbolic versus Material Concerns of Rural Consciousness in the United States." *Political Geography* 96 (June): 102658.

STUDY DESIGN

Survey Section 1. Quasi Pre-Treatment Measure of Place-Based Resentment (2 units)

Note: Each place-based resentment item has two randomized variations meant to balance out acquiescence bias so that it does not point in either a pro-rural or pro-urban direction. These randomizations are indicated with [brackets]. All items will be recoded from 0 to 1 such that 0 represents anti-urban resentment and 1 represents anti-rural resentment.

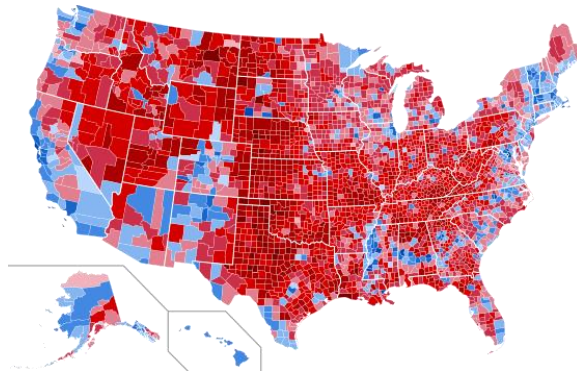
To what extent do you agree or disagree with the following statements?... (Response Set: Strongly agree, agree, slightly agree, neither agree nor disagree, slightly disagree, disagree, strongly disagree.)

Q1.1. "Politicians care more about representing the interests of Americans in [rural areas/cities] than the interests of Americans in [cities/rural areas]."

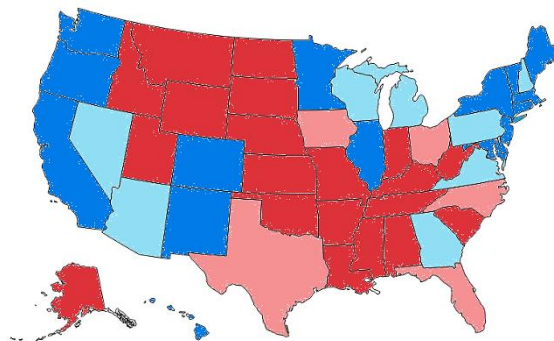
Q1.2. "People living in [rural areas/cities] don't understand or respect the [city/rural] lifestyle."

Survey Section 2. Treatment and Placebo (3 units)

Note: Respondents will be randomized into either the treatment or placebo condition. All respondents will then be asked a decoy question about the 2024 presidential election.



Treatment. In the 2020 presidential election, Americans living in different areas often voted for different candidates. This is illustrated in the map above, which shows the 2020 election results by county. Counties that voted for Joe Biden (in blue) usually include cities and urban areas, while counties that voted for Donald Trump (in red) usually include more rural areas.



Placebo. In the 2020 presidential election, Americans living in different states often voted for different candidates. This is illustrated in the map above, which shows the 2020 election results by states that gave more votes to Joe Biden (in blue) and states that gave more votes to Donald Trump (in red).

Q2.1. Imagine Trump and Biden were running against each other for president in 2024. Which candidate do you believe would have the better chance of winning the 2024 election?

Response Set: Joe Biden, Donald Trump, Don't Know

Survey Section 3. Post-Treatment Measure of Place-Based Resentment (4 units)

Note: Each place-based resentment item has two randomized variations meant to balance out acquiescence bias so that it does not point in either a pro-rural or pro-urban direction. These randomizations are indicated with [brackets]. All items will be recoded from 0 to 1 such that 0 represents anti-urban resentment and 1 represents anti-rural resentment.

To what extent do you agree or disagree with the following statements?... (Response Set: Strongly agree, agree, slightly agree, neither agree nor disagree, slightly disagree, disagree, strongly disagree.)

Q3.1. “[Rural areas/cities] get everything they want from policymakers while [cities/rural areas] get the short end of the stick.”

Q3.2. “Americans who live in [rural areas/cities] are generally more hardworking than Americans who live in [cities/rural areas].”

Q3.3. “Despite what some people say, [rural/urban] communities best represent the “real America”, not [urban/rural] communities.”

Q3.4 “[Rural areas/cities] pay more in taxes and get less government services in return than [cities/rural areas].”

SAMPLE SIZE JUSTIFICATION AND POWER ANALYSIS

Sample Size Request: 1,250 Respondents.

I will use a quasi-pre-post design. Clifford et al. (2021) offers guidance about the power that can be achieved with pre-post designs. The figure below reproduced from Clifford et al. (2021) depicts the standardized minimum detectable effects (80% percent power) as functions of sample size and pre-post correlation strength. Based on the interitem correlations of place-based resentment items, I can reasonably expect a pre-post correlation of 0.50-0.70. Substantively, I am interested in an effect of at least 0.20 standard deviations. To achieve 80% power to detect a 0.20 effect, I need 500 Democrats and 500 Republicans (including independents who lean towards a party). Assuming a 0.60 pre-post correlation, that approximately 15% of the sample are pure independents, and an even distribution of Democrats and Republicans, I would need at least 1,200 respondents to achieve 80% power. I am therefore requesting a total sample of 1,250 respondents.

