

**Manipulated Maps, Manipulated Participation: How
Partisan Gerrymandering Influences Conventional
and Unconventional Political Engagement**

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Abstract

Partisan gerrymandering poses a unique challenge to the American political system. Defined as the process of redistricting legislative districts to give one party an outsized advantage, partisan gerrymandering causes disadvantaged parties to lose meaningful representation in Congress. What is unknown is how changes in representation due to gerrymandering affect participation. This thesis answers the question: “What is the effect of partisan gerrymandering on conventional and unconventional forms of participation?” Using data from the Cooperative Election Study (CES) and a unique survey experiment, I find that Americans do not modify participation levels based on simply living in a gerrymandered district. On the contrary, when individuals are primed to think about the effects of gerrymandering within their district, they are more willing to unconventionally participate in the future. Similarly, when individuals are primed to think about not being gerrymandered, they are more willing to conventionally participate.

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Introduction

In the United States, congressional redistricting dramatically and controversially shapes electoral power. Across the country, state legislatures are responsible for redrawing congressional districts and determining which voters end up in districts aligned with their political interests. This power shapes congressional representation within each district and statewide. By manipulating congressional maps through gerrymandering, the process of drawing legislative districts to give a particular group an outsized advantage, legislators and redistricting bodies can draw constituents out of representation that reflects their beliefs at the district and state levels. Gerrymandering fundamentally changes the political environment in affected districts, leading to the distortion of fair representation, limiting the power of minoritized groups and parties, and eroding trust.

Throughout US history, gerrymandering has been used to preserve and strengthen different groups' political power. Racial gerrymandering was used to diminish the voting power of racial minorities in the South for decades, leading to the Voting Rights Act (Grofman and Davidson, 2011). Today, the most pervasive form is partisan gerrymandering. Partisan gerrymandering occurs when members of the majority (or advantaged) political party redraw congressional districts to benefit their party's electoral odds and seat share, diminishing the minority party's power. By changing the party balance in congressional districts, partisan gerrymandering carries the potential to influence how constituents engage with politics and think about their representation.

Today, many states employ a redistricting process that gives certain parties an outsized advantage. In Illinois, Democrats draw districts to favor their party in congressional races. While

Democrats won 58% of the vote in the 2020 presidential election, they held 82% of congressional districts after the 2022 redistricting cycle. In Texas, Republicans received 52% of the 2020 statewide vote but won 66% of its congressional districts in the 2022 midterms (New York Times, 2020; 2022). These gaps in the partisan makeup of states compared to their congressional delegation show how partisan gerrymandering holds the power to distort electoral outcomes and give one party a distinct advantage.

Given that partisan gerrymandering wastes more votes and makes it difficult for voters to meaningfully participate in an election, it may shape the political behavior of people living in these districts. On the one hand, if gerrymandering diminishes the power voters hold in a constituency, they might be less likely to vote. On the other hand, if constituents view their votes as less consequential, they may be more likely to seek other forms of participation. In this thesis, I seek to understand the effect that partisan redistricting has on the political behavior of constituents. Using information from recent congressional elections and a survey experiment, I seek to answer the central question: “What is the effect of partisan gerrymandering on conventional and unconventional forms of participation?” Theoretically, I argue that living in a partisan gerrymander may cause individuals to believe that elections are unfair or rigged, lowering their willingness to vote, or conventionally participate. This may increase their willingness to turn to other unconventional forms of participation. I also argue that members of the disadvantaged party might feel that they are unfairly set up to lose elections, pushing them towards more impactful forms of political engagement. To test these arguments, I utilize a two-part quantitative approach. First, I conduct a secondary data analysis using the Cooperative Election Survey (CES) from 2018 to 2022. Next, I conduct a survey experiment where I provide respondents with a passage about partisan gerrymandering to determine if being primed to think

about whether gerrymandering occurs in one's district affects their willingness to engage in different forms of political participation.

Ultimately, I find that learning about living in a gerrymandered district does not affect levels of conventional forms of political participation, such as voter registration and individual turnout. However, being primed to think about living in a congressional district increases individual willingness to engage in unconventional forms of participation like protesting, signing a petition, contacting elected officials, donating, and posting about politics online. Additionally, being primed to think about not living in a gerrymandered district increases future willingness to vote (or conventionally participate).

By answering this question, I seek to understand how partisan gerrymandering alters the political behavior of Americans. The results of this project speak to three core implications. First, they suggest that individuals are not aware of the impact (or the absence of an impact) from gerrymandering in their district, and being primed to think about these issues alters how they view participation. Second, they suggest that individuals who are aware they are not gerrymandered are more eager to vote. This could underscore the urgency of reforms to the redistricting process to eliminate partisan gerrymandering and improve electoral participation. Finally, these findings provide insight into how communities that have seen their vote diluted by gerrymandering may remain resilient and continue to engage in politics through unconventional means. They may also prove useful for minority parties and organizers seeking to advance their political agenda despite diminished procedural power.

Chapter 1

Conceptualizing Partisan Gerrymandering and Participation

For decades, scholars in American politics have sought to answer two central questions: “Who Votes?” and “Who Participates?” My research builds on literature evaluating what causes Americans to engage in politics and the effects of gerrymandering on US political behavior. In this section, I define political participation, situate it in the existing literature, and examine what research evaluating gerrymandering and participation has failed to consider.

Active political participation is the cornerstone of American democracy. Regular engagement with our government institutions through elections and other forms of participation helps to ensure that the will of the majority is enacted. In recent decades, new forms of media and new methods of contacting elected officials have expanded the definition of political participation to include everything from voting in elections to posting online. I separate political participation into two categories: conventional and unconventional. Conventional participation measures have historically relied on electoral activities, including registering to vote and voting in elections (see Brady, 1999; van Deth, 2001). Voting behavior was historically considered the primary way individuals engaged in government because it was the most formalized way for citizens to be represented in our political system. For example, Verba et al. defined political participation as “the legal acts by private citizens that are more or less directly aimed at influencing the selection of governmental personnel” (Verba, Nie, Kim 1978, 1).

However, over time, other methods of participation have become more recognized by scholars. Some forms of participation were historically underutilized but grew over the 20th century, such as protesting, signing petitions, donating to politicians, and contacting elected

officials (DiGrazia, 2014). The rise of social media and online platforms also amplified how voters can engage in politics by posting or sharing messages that can reach politicians and shape the policymaking process. Scholars have labeled these actions “unconventional” participation to emphasize their distinct nature from voting in elections (Ekman and Amnå, 2012). Following these lines of research, I define conventional participation as being registered to vote and voting in elections. I conceptualize unconventional participation as participating in protests, signing petitions, donating to political causes, contacting elected officials, and posting about politics online.

Scholars have long sought to understand what individual factors influence different levels of participation. Today, there are three prevailing theories of why individuals participate in American politics. The first is the rational choice model, which posits that the choice of whether to vote depends on whether the cost of voting is less than the benefit from voting for their preferred candidate (Downs, 1957). The most classic version of this model has been exemplified by the equation:

$$E(V) = PB + D - C$$

In this model, P is the probability that the voter will decide the outcome of the election and B is the benefit one receives when their preferred candidate wins. Also factored into this model is a D term measuring the “expressive” rewards of voting, such as satisfaction from participating in our democracy or expressing allegiance to a favored candidate (Fiorina, 1976). Finally, C represents the costs of voting, like time spent waiting in line or driving to a polling precinct. Under this model, when $D > C$, citizens should vote. However, when $C > D$, citizens should only vote if there is a high likelihood that they are the decisive vote. Essentially, if the expected utility

of a voter from voting is negative (i.e., $E(V) < 0$), a rational voter should not participate (Aldrich, 1993).

While logically appealing, the rational choice model fails to fully explain why people vote. Voters rarely, if ever, do an explicit cost-benefit analysis of their vote. Furthermore, if $C > D$, as is likely the case for most Americans, it would not make sense to vote. Thus, while theories such as rational choice voting can speak to the factors that may increase or decrease voter participation, they often fall short of explaining individual participation (Aldrich, 1993).

A second theoretical framework focuses on factors that make people more or less likely to vote. The resource theory of participation argues that political participation is a function of access to sufficient time, money, and civic knowledge to engage in politics (Verba, 1987). Given that individuals with lower socioeconomic status may have fewer resources to access the ballot box, wealth can be a driving factor behind political participation. Similarly, those with lower education levels are more likely to hold jobs where it is hard to leave work early and vote in elections (Brady et al., 1995). Those with lower socioeconomic status may also have less access to civic knowledge and skills. Other factors, including education, spoken languages, and community involvement, can all shape how people participate in politics (Brady et al., 1995). While all these factors help scholars understand participation, resource theory has still been a weaker predictor of political participation for minority Americans than for White Americans (Junn, 2010). This has led scholars to consider other models that better account for political participation for all Americans.

Finally, recent scholarship points to social norms to explain why Americans engage in politics. These include emphasizing civic duty as a social norm and community-based norms of participation. For example, get-out-the-vote field experiments have found that individuals were

consistently more likely to vote when they received mailers promising to publicize whether they voted in previous elections (Gerber et al., 2008), pointing to social pressure as a mobilizing factor. Thus, when individuals face pressure to vote or perceive social consequences for not voting, they may become incentivized to participate. Notably, there is also evidence that political norms develop within American subgroups as well. For example, a similar survey experiment found that Black and Latino Americans provide more social incentives for participation than White Americans (Anoll, 2018).

While these models explain how rational decision-making, resource access, and social pressure influence individual engagement, none thoroughly evaluate how the political dynamics within one's district, like the presence (or absence) of gerrymandering, influence both conventional and unconventional forms of participation. Still, some of these theories working in tandem can help predict part of this puzzle. Using the rational choice theory, the probability of being the decisive vote is often zero for gerrymandered voters because the election margins are unlikely to be close. This suggests that voters would only vote in a gerrymandered district if their D term was greater than the C term. Under the framework of resource theory, costs would likely be higher for those with a lower SES status, lowering turnout. Nonetheless, these theories fail to account for other explanations of how gerrymandering influences voter turnout, such as voter disaffection with the system. These theories also do not consider how dissatisfaction with elections in gerrymandered districts could cause voters to turn to other unconventional forms of participation. Accordingly, I seek to bridge this gap by expanding upon traditional theories of participation to further understand gerrymandered districts.

Partisan gerrymanders are usually formed using one of two tactics: cracking or packing. Cracking is the process of diluting the opposition party's power by splitting its voters across two

or more districts where they are unable to obtain a majority. This ends up wasting high levels of opposition party votes. Packing occurs when a minority party is too large to be denied representation. When packing, the empowered party seeks to concentrate on as many minority party voters as possible in one district so that the opposition cannot win multiple seats (Bullock, 2010).

In recent decades, scholars have paid renewed attention to the relationship between these forms of partisan gerrymandering and voter turnout. Overall, there is conflicting evidence over whether partisan gerrymandering decreases voter turnout. On the one hand, scholars have argued that it is unlikely to affect participation. Rush (1992; 1993) hypothesized that partisan gerrymandering would not affect turnout as much as racial gerrymandering because partisanship is a fluid and evolving form of identity, unlike race. Similarly, the level of election competitiveness (a proxy for partisan gerrymandering) does not influence voter turnout (Moskowitz and Schneer, 2019). Alternatively, some scholars have found both positive and negative relationships between partisan gerrymandering and turnout. Individual turnout increases among Americans when they belong to the advantaged party within their congressional district (Fraga, Moskowitz, and Schneer, 2022). This would indicate that opposition party voters in cracked districts would be less likely to vote, but packed voters would be more likely to vote. But another study found that living in a gerrymandered district broadly decreases voter turnout (Jones, Silveus, and Urban, 2023). There is no consensus about how gerrymandering influences conventional participation, if it does at all. In this thesis, I seek to obtain more definitive evidence of how gerrymandering is related to turnout changes between 2018 and 2022 using CES survey data. Through a survey experiment, I venture to understand how being primed to

think about the electoral implications of gerrymandering may influence Americans' willingness to vote.

Furthermore, scholars have yet to examine the impact of partisan gerrymandering on unconventional participation. While scholars have paid some attention to the effect of partisan gerrymandering on conventional participation, they have yet to thoroughly analyze its impact on different forms of engagement. This is significant because I hypothesize that gerrymandering has dramatically different effects on the two types of participation. In elections, partisan gerrymanders make it nearly impossible for a member of the disadvantaged party to influence the electoral outcome. However, since unconventional participation is not tied to elections, individuals can engage in other forms of participation where their voice is not as diluted by the electoral map. Accordingly, this research helps to answer a question left long unanswered about the downstream effects of partisan gerrymandering on unconventional participation.

Chapter 2

Hypotheses

In this thesis, I evaluate two overarching hypotheses about the effect of partisan gerrymandering on political participation. The first concerns conventional participation. When constituents weigh whether or how to participate in politics, I pose that they are focused on their ability to elect their preferred candidate and express their political views in ways that shape representation and responsiveness (van Deth, 2001). Living in a partisan gerrymandered district can shape participation through several potential pathways. First, constituents, particularly those affiliated with either the disadvantaged party, might feel more disillusioned with the electoral system, seeing it as rigged toward one side or unaccountable (Kennedy, 2017). Second, constituents affiliated with the disadvantaged party in a cracked district might recognize that it is more difficult to elect a representative of their party because politicians drew them out of representation (rather than geographical factors, like living in an area where one party had a stronghold over voters).¹ While constituents in areas with naturally occurring partisan imbalances may feel discouraged about their ability to elect a representative from their party, those in gerrymandered districts might feel especially disheartened because achieving representation was geographically possible, but partisan manipulation intentionally denied them

¹ Notably, differences in participation levels between packed and cracked partisan gerrymanders go beyond the scope of this thesis. Given the results of this thesis, future work can seek to understand how constituents in packed districts participate differently from those in cracked districts because of the different effects of each type of gerrymandering. Packed districts can help minority-party aligned voters elect a member of their party in their district while disadvantaging them in terms of the makeup of the state's congressional delegation. Cracked districts split minority-party aligned voters such that they receive little, or no, congressional representation.

that opportunity. These two insights drive my first overarching hypothesis (H1), that residing in a partisan gerrymander lowers levels of conventional political participation.

My second hypothesis concerns unconventional participation. Partisan gerrymanders make it more difficult for voters to elect representatives of their choosing, at both the district level (e.g., packed districts that create safe seats for one party) and state level (e.g., a state-wide minority in redistricting can win only a small fraction of seats even if they win a majority of voters).

However, constituents can use other forms of political participation to share their views and to try to shape the policy representation they get from elected officials. These actions encompass unconventional forms of political participation. While all constituents might value unconventional participation, constituents in partisan gerrymanders might be particularly attentive to these options since the most direct route of influence – elections – has been limited by partisan forces. Given the framework behind the first hypothesis, if voters in a gerrymandered district believe that elections are rigged towards one side, they may turn to other forms of influence that have not been subject to the same “rigging.” Thus, I hypothesize that residing in a partisan gerrymander increases unconventional participation levels (H2).

Given the likelihood that the impact of partisan gerrymandering is asymmetric for voters aligned with the majority and minority party in the state, I also test hypotheses that the relationship between partisan gerrymanders and participation is stronger for constituents aligned with the disadvantaged party. I evaluate both sets of hypotheses across the secondary data analysis and survey experiment stages of my research to determine the effect of partisan gerrymandering on participation. In each of these sections, I develop a set of sub-hypotheses that are specific to the dataset I am working with. These supplementary hypotheses are shown in Table 2.1.

Table 2.1: Hypotheses		
	H1: Residing in a partisan gerrymander lowers levels of conventional political participation.	H2: Residing in a partisan gerrymander increases levels of unconventional political participation.
Secondary Data Analysis Hypotheses	<p>H1a: Living in a gerrymandered district is associated with decreased conventional participation.</p> <p>H1b: Living in a gerrymandered district is associated with a stronger decrease in conventional participation for individuals aligned with the disadvantaged party.</p>	<p>H2a: Living in a gerrymandered district is associated with increased unconventional participation.</p> <p>H2b: Living in a gerrymandered district is associated with a stronger increase in unconventional participation for individuals aligned with the disadvantaged party.</p>
Survey Experiment Hypotheses	<p>H1c: Priming respondents to think about partisan gerrymandering and that they live in such a district will reduce prospective turnout in 2026.</p> <p>H1d: Priming respondents to think about partisan gerrymandering and that they live in such a district will reduce prospective turnout in 2026 more among members of the disadvantaged party.</p> <p>H1e: Priming respondents who live in a partisan gerrymander to think about which political party is disadvantaged will reduce prospective turnout in 2026 more than among those not told which party is disadvantaged.</p> <p>H1f: Priming respondents to think about partisan gerrymandering and that they do not live in such a district will increase prospective turnout in 2026.</p>	<p>H2c: Priming respondents to think about partisan gerrymandering and that they live in such a district will increase prospective unconventional participation.</p> <p>H2d: Priming respondents to think about partisan gerrymandering and that they live in such a district will increase prospective unconventional participation more among members of the disadvantaged party.</p> <p>H2e: Priming respondents who live in a partisan gerrymander to think about which political party is disadvantaged will increase prospective unconventional participation more than among those not told which party is disadvantaged.</p> <p>H2f: Priming respondents to think about partisan gerrymandering and that they do not live in such a district will not affect prospective unconventional participation.</p>

Using data from the CES, I test hypotheses H1a and 2a by looking at associations between partisan gerrymandering and political participation at the district level. I first assess whether there is a relationship between living in a partisan gerrymander and political participation at the district level (H1a and H2a). I aggregate participation levels by district and year to correspond with the unit of analysis for my independent variable: whether a district is a partisan gerrymander. Next, I utilize an interaction term between living in a gerrymandered district and belonging to a disadvantaged party to assess whether this relationship is stronger for members of the disadvantaged party (H1b and H2b). To test these hypotheses, I aggregate participation levels by district, year, and identification with the disadvantaged party.

Using my survey experiment, I test hypotheses H1c-f and H2c-f. H1c and H2c measure whether individuals living in a gerrymandered district alter their prospective participation because they receive a passage that primes what gerrymandering is and that they live in a gerrymandered district. I expect that individuals are less likely to vote when they learn that their vote is less determinative of the electoral outcome (which occurs in gerrymandered districts). I also anticipate that respondents will consequently seek other forms of participation, supporting H2c. H1d and H2d test whether respondents living in a gerrymandered district will be less likely to vote and more likely to engage in other forms of participation when they are primed to think about which party is disadvantaged than when they are primed to simply think about whether they live in a gerrymander. In H1e and H2e, I test this relationship further by evaluating whether the relationship between being told about which party is disadvantaged by partisan gerrymandering in one's district and belonging to that party decreases turnout and increases unconventional participation. Finally, I test hypotheses H1f and H2f using the respondents who did not live in a partisan gerrymander. In this case, I look at whether being told about not living

in a gerrymandered district increases turnout and keeps prospective unconventional participation stable.

Chapter 3

Measuring Participation

To answer my guiding question, “What is the effect of partisan gerrymandering on conventional and unconventional forms of participation?”, I consider two different ways of engaging with politics. While serving two functionally distinct roles: selecting representatives and influencing the policymaking of these representatives, analyzing conventional and unconventional participation together elucidates how priorities motivating political participation vary due to gerrymandering. In the following paragraphs, I discuss how I measure each of the variables across both phases of my research.

Using conventional participation elucidates the consequences of partisan gerrymandering on the most direct form of democratic engagement in the US. Voting is how Americans choose their leaders, so understanding how and why people vote has significant implications on how the government operates. Measures of conventional participation are consistent across survey projects. Most comprehensive surveys of political participation, including the Cooperative Election Study (CES), ask about voting registration and individual voter turnout in the preceding election. These two measures are the core of my conceptualization of conventional engagement. An overview of the types of conventional participation I measure is shown in Table 3.1. Additionally, specific variables of conventional participation from the CES dataset are shared in Appendix 1, Table A1.1.

Table 3.1: Conventional Participation Variables	
Dataset	Variables
CES	Voter registration, primary election turnout, general election turnout
Survey Experiment	Voter registration, primary election turnout, general election turnout, willingness to vote in the 2026 election.

To measure conventional participation for my secondary data analysis, I utilize data from the Cooperative Election Study (CES) from 2018 and 2022. The CES is conducted every two years during each election cycle. It surveys over 50,000 respondents across the US using a nationally stratified sample. This survey covers a wide range of topics, including respondents' demographic background, political behavior, voting intentions, and levels of political information. The CES provides voter registration and turnout data for primary and general elections.

In my survey experiment, I use the same measures as the CES as they provide the most distinct measures of previous conventional participation. My analysis is also unique as I conducted a priming experiment, intended to determine the effect of learning about gerrymandering on future willingness to participate. Thus, I also ask prospective questions about whether voters are willing to vote in the 2026 election after being assigned to an experimental passage. The 2026 midterm elections are a time when House races are at the forefront, meaning that gerrymandered districts could be a larger factor motivating voter turnout.

While conventional participation is the most common way to engage in American politics, it is also important to study how gerrymandering influences unconventional participation. When enough constituents express their opinions on policy issues, they carry the potential to influence representatives (Butler & Nickerson, 2011). Constituent pressures, whether they be through

direct contact or external public-facing movements, have the power to shift policymaking and agenda-setting (King et al., 2007). If Americans grasp that partisan gerrymandering diminishes their political power, they may seek other ways to influence the policymaking process. By understanding how Americans engage in politics otherwise, I seek to analyze how they continue to shape our country's political landscape. In recent years, these unconventional forms of participation have come to the forefront of American politics as protests, social media, political donations, and petitions have all become more viable forms of political participation.

Unlike conventional participation, measures of unconventional engagement are inconsistent across surveys. Some surveys only include a few forms of unconventional participation as responses. Others use outdated measures that fail to account for the surging influence of the internet and social media. Still, others conflate forms of political engagement with engagement in other forms of culture. Accordingly, I seek to pick out a few key forms of unconventional participation measured by CES.

The CES asks a series of questions about participation in a variety of political behaviors within the past year. These behaviors include attending local meetings and protests, donating to a candidate or political cause, and using social media for political purposes (see Table 3.2). The CES also provides additional measures, including contacting public officials, and more thorough measures of donations and online political engagement. The scope of these specific questions is included in Appendix 1, Table A1.2. In my survey experiment, I ask questions about past and future participation in these activities in the past year to maintain consistency. However, I also incorporate an alternative form of unconventional political participation, namely, signing a petition. Additionally, after exposing individuals to the priming vignette, I ask them a series of

questions about prospective political behavior to understand the effect of being primed to think about partisan gerrymandering on willingness to engage in unconventional participation.

Table 3.2: Unconventional Participation Variables	
Dataset	Variables
CES	<i>In the past year:</i> attended local political meetings, attended protests, donated to a candidate or political cause, recent social media use relating to politics.
Survey Experiment	<i>In the past year:</i> attended protests, posted a political message, contacted elected officials, signed a petition, attended local political meetings, donated to a political cause. <i>Future willingness to:</i> attend a protest, post a political message, contact an elected official, sign a petition, attend local political meetings, donate to a political cause.

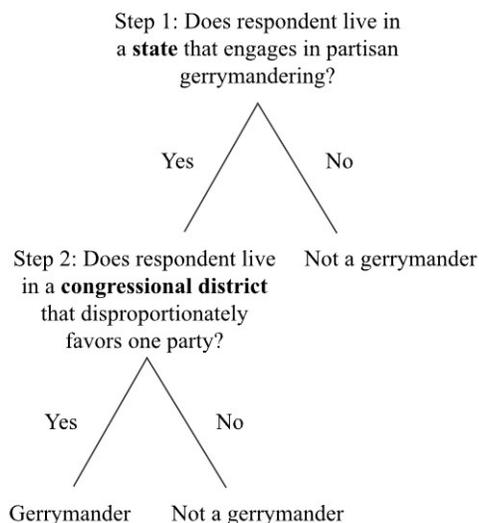
Chapter 4

Methodology

To test my hypotheses, I employ a three-stage method. In the first stage of my method, I determine which states engaged in partisan gerrymandering and which districts can be classified as partisan gerrymanders for the 2018 and 2022 midterm elections. Next, I evaluate existing large-sample surveys of Americans from 2018 and 2022 to assess how gerrymandering relates to unconventional and unconventional forms of participation. Finally, I conduct a survey experiment testing the effect of priming respondents to think about redistricting and whether they live in such a district on their future willingness to participate.

Identifying Partisan Gerrymanders

To determine whether respondents live in a gerrymandered district, I rely on a two-step method using electoral data that identifies whether gerrymandering affects each district, which I can then map to respondent zip codes. This method is displayed by the flow in Figure 4.1. The first step of this method determines whether partisan gerrymandering occurs at the state level. Next, at the district level, I calculate whether one party's votes are disproportionately wasted in comparison to the other party. I follow these two steps because partisan gerrymandering occurs at the state level, often with implications for whether the majority party is advantaged in its share of seats relative to votes. However, individual districts are where the map may create lopsided districts that heavily favor one side or the other.

Figure 4.1: Identifying Partisan Gerrymanders

In the first step of my method, I assess whether statewide congressional maps engage in partisan gerrymandering using a calculation called the efficiency gap.² Stephanopoulos and McGhee (2015) developed the efficiency gap to assess the partisan advantage in a district using the number of wasted votes. Conceptually, the efficiency gap captures whether one party wastes more votes in the election than another. For the winning party, every vote cast past the number needed to win (likely a plurality of votes) is considered wasted. All votes for the losing party are also considered wasted votes. The efficiency gap is calculated by subtracting the number of wasted votes for the minority party from the number of wasted votes for the majority party (the majority party's margin of victory) and dividing that difference by the total number of votes cast (Stephanopoulos and McGhee, 2015).

Notably, the efficiency gap at the state and district level is usually calculated using election data *after* districts are redrawn. Because the efficiency gap is traditionally an ex-post measure of gerrymandering and my analysis evaluates the effect of living in a gerrymandered district on

² While scholars have recently begun utilized simulations of the redistricting process to determine whether partisan gerrymandering has occurred within individual states for the 2020 cycle, this data is unavailable for all states in 2018 (Chen & Rodden, 2015; Fitfield et al., 2020).

subsequent participation, I calculate a predicted efficiency gap with data from the preceding election. This calculation is in line with other work in the field studying the effect of gerrymandering on future electoral outcomes, utilizing predicted measures of gerrymandering to avoid circular data usage (e.g., Jones, Silveus, and Urban 2023). To calculate the predicted efficiency gap in 2018, I use presidential results from the 2012 election from the *American Almanac of Politics*, as it is the closest election to the 2010 redistricting cycle.³ I use the same procedure to calculate the predicted efficiency gap in 2022 with data from the 2020 presidential election, which directly preceded the 2020 redistricting cycle. Utilizing the 2010 and 2020 redistricting cycles is advantageous because these are the two most recent cycles where I can analyze how changes in whether a district is gerrymandered relate to participation levels. Furthermore, the 2010 redistricting cycle was the first that provided comprehensive, public, and nationwide data about redistricting. Accordingly, these two cycles are also the easiest to merge with the CES dataset I seek to examine.

I calculate the predicted efficiency gap at the state level using Equation 4.1.

$$\left| \frac{\# \text{ Republican Wasted Votes} - \# \text{ Democrat Wasted Votes}}{\# \text{ Total Votes}} \right| \times \# \text{ Congressional Districts} \quad (\text{Eqn. 4.1})$$

If this number exceeds one (i.e., the difference in wasted votes is greater than the size of one congressional district), I consider that state to engage in partisan gerrymandering. In their analysis, Stephanopoulos and McGhee (2015) utilize a threshold of two congressional districts to

³ I use the 2012 presidential election results in place of the 2008 presidential election results as I believe that the 2008 results are an inaccurate predictor of district-level partisanship ten years later. I use the 2012 presidential elections instead to predict turnout as it is closer to the redistricting process and is more reflective of district dynamics, without being an election in which I seek to capture participation. Due to court rulings, Texas and North Carolina substantially revised their congressional district maps between 2012 and 2018. The *Almanac of American Politics* does not include the 2012 presidential vote count in these redrawn districts, so I instead rely on the 2016 presidential election results as the preceding presidential election in these cases.

identify a state partisan gerrymander. This threshold is too high for my analysis. Stephanopoulos and McGhee primarily use the efficiency gap to identify gerrymandering in state legislatures, where there are more districts. At the congressional level, states with fewer districts are eliminated because it is mathematically harder for them to surpass that two-seat threshold. If I were to use this calculation, no state with fewer than eight congressional districts could be identified as a partisan gerrymander, leading to issues of under-specification. This would also significantly reduce the power of my analysis. Accordingly, I employ a one-district threshold, which instead allows for smaller states to be identified as gerrymanders and increases my power. The trade-off is that I include less-extreme gerrymanders as gerrymanders, nonetheless.

As shown in Figures 4.2 and 4.3, eighteen states were considered gerrymandered in 2018 and 2022. Notably, a wide range of states used maps indicative of state-level partisan gerrymandering, ranging from populous states, like Texas and California, to smaller states, like Iowa and Connecticut. Gerrymandered states are both coastal and interior, Southern and Northern, and Republican and Democratic.

Figure 4.2: States with Gerrymandered Di

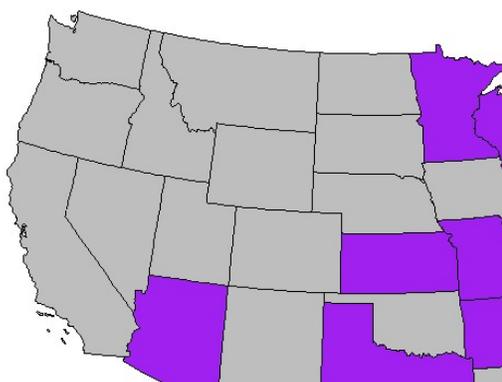
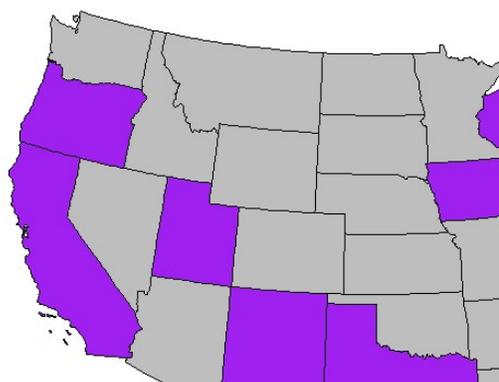


Figure 4.3: States with Gerrymandered D



Still, this method of identifying state-level partisan gerrymandering has limitations. First, the only factor considered in determining whether a state is gerrymandered is the disparity in wasted votes by party. Factors that may otherwise affect the construction of districts, such as geographic

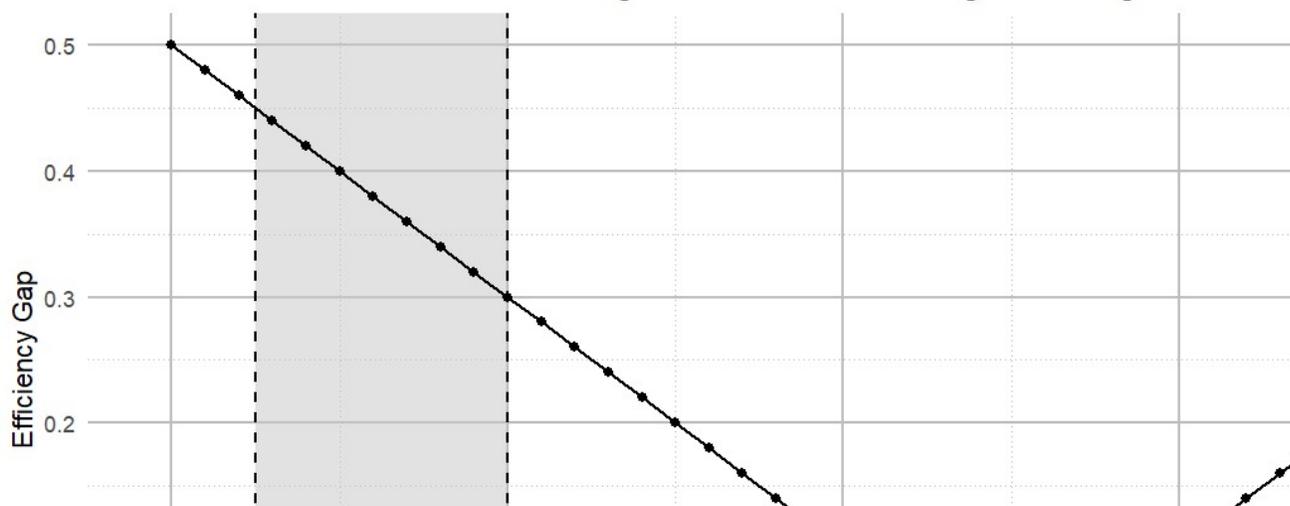
compactness or the concentration of co-partisans in a small region of a state, cannot be accounted for. Similarly, mandates from the Voting Rights Act regarding majority-minority districts, particularly in the Southern US, may also influence the redistricting process in ways not accounted for by these metrics.

Once I determine whether a state utilizes partisan gerrymandering to redraw its districts, I turn to assessing which individual districts are affected by gerrymandering. To identify whether specific districts are gerrymandered, I calculate the predicted efficiency gap at the district level using Equation 4.2. The smaller this value is, the less gerrymandered a district is.

$$\left| \frac{\# \textit{Republican Wasted Votes} - \# \textit{Democrat Wasted Votes}}{\# \textit{Total Votes}} \right| \quad (\text{Eqn. 4.2})$$

This calculation provides the difference in predicted wasted votes between parties as a fraction of the total number of votes cast in the previous presidential election. These values can range from zero (no gap in partisan disadvantage) to 0.5 (all wasted votes belong to one party). When interpreting these results, lower scores will indicate a district with a steady partisan advantage, but an equal number of wasted votes for either party (usually somewhere around a 70-30 partisan split). On the other hand, higher scores can be indicative of either cracking or packing, as seen in Figure 4.4. If members of a disadvantaged party are packed into one district, there will be more wasted votes, as any vote past 50% counts as a wasted vote for that party. Alternatively, if members of a disadvantaged party are cracked across districts, there is a higher efficiency gap as the advantaged party wins by a narrower margin, leading the disadvantaged party to have a higher wasted vote count.

Figure 4.4: District Winning Percentage and Efficiency

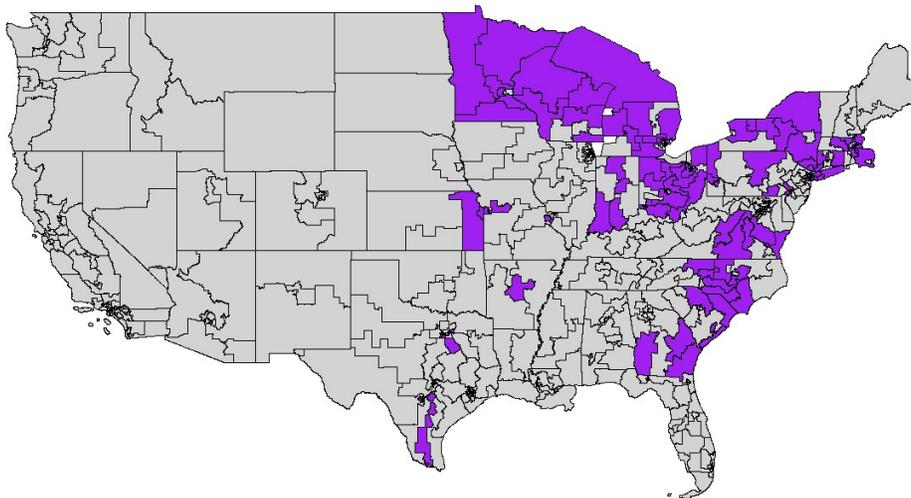


Using this structure, I classify a gerrymandered district as one with a predicted efficiency gap greater than 0.30. However, districts where the winning party receives less than 54% of the vote *and* the efficiency gap is greater than 0.47 will not be classified as a gerrymandered district. A cutoff of 0.30 allows me to consider districts where one party experiences substantially more wasted votes than the other, indicating that either packing or cracking has occurred. Because district gerrymandering is not a concrete concept, the cutoff of 0.30 does not need to conform to any specific metric; it simply measures what districts are more gerrymandered than others. The second rule - a district is not gerrymandered when the efficiency gap is greater than 0.47 and the win percentage is less than 54% - accounts for competitive districts. When the efficiency gap is high and the election margin is close (i.e., the winning party percentage is closer to 50%), the race may not be a cracked district, but rather a competitive congressional district. In this case, the number of wasted votes will swing considerably based on turnout, rather than partisan advantage

in the district. Because these cases present a district efficiency gap that misrepresents the likelihood of one's vote affecting the outcome, they are not considered partisan gerrymanders.⁴

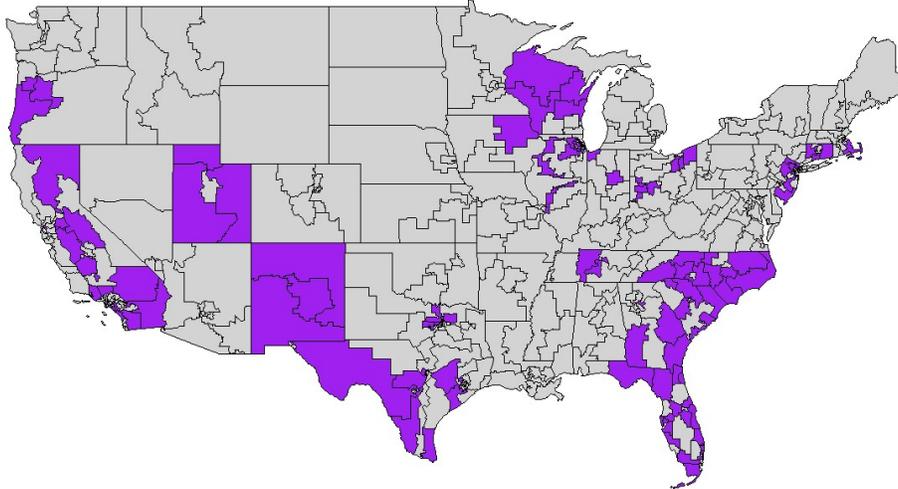
Utilizing the predicted district efficiency gap calculation, approximately 44% of districts nationally had a district efficiency gap greater than 0.30. If a district satisfies these district efficiency gap constraints *and* is in a state that engages in partisan gerrymandering, I code that district as a gerrymandered district. All other districts are considered not to be gerrymandered. These gerrymandered districts are shown in Figures 4.5 and 4.6, maps of congressional districts in 2018 and 2022.

Figure 4.5: Gerrymandered Districts in 2018 Elections



⁴ It should be noted that using a specific cutoff carries some limitations. Previous research has used different methods to determine what a partisan gerrymander is, whether it be a predetermined statewide cutoff value (e.g., Stephanopoulos and McGhee, 2015) or a continuous variable measuring the degree of gerrymandering (e.g., Jones, Silveus, and Urban, 2023). While this specific cutoff has not been used before, it is a more conservative approach that yields greater balance in gerrymandered and non-gerrymandered districts. Accordingly, while I do not employ a method used before, I believe my adjustments to the cutoff do not affect the validity of my results, as I am still separating districts that are more gerrymandered from those that are less gerrymandered.

Figure 4.6: Gerrymandered Districts in 2022 Elections



Secondary Data Analysis

After determining which states and districts are partisan gerrymanders, I conduct regressions merging district-level gerrymandering data with the CES variables measuring voter turnout aggregated to the district level from the 2018 and 2022 midterms. I use these elections because they are the two most recent midterms before and after a redistricting cycle. Using the midterm elections preceding and following redistricting allows me to test the changes in districts that became a partisan gerrymander during the 2020 redistricting cycle. These elections also ensure that presidential races are not the overwhelming factor motivating turnout. I conduct this analysis based on redistricting at the congressional district level because House races are the most standardized form of single-member district legislative elections within the US.

To identify participation, I develop a continuous variable from 0 to 100 representing the percentage of respondents who participate conventionally. Similarly, I develop a 0 to 100 variable for unconventional participation, measuring engagement with the four CES unconventional participation measures at the district level.

To analyze the CES data, each respondent is identified by their zip code and paired with their congressional district using location data. Once I have tied individuals to their 2018 and 2022 congressional districts and determined whether they are gerrymandered, I regress participation variables on whether gerrymandering occurred. First, I conduct an OLS regression measuring whether participation levels vary across gerrymandered and non-gerrymandered districts. While this regression cannot be utilized inferentially, it helps to yield insights into the inherent differences between gerrymandered and non-gerrymandered districts.

Next, to test hypotheses H1a, H1b, H2a, and H2b, I rely on difference-in-differences (DiD) regressions. In this case, districts are the unit of observation for the treatment groups. To conduct this analysis, I solely consider districts that were not gerrymandered in the 2018 cycle to measure the effect of “treatment,” or becoming gerrymandered. In my model, the pre-treatment period is the 2018 midterm elections because it was before the 2020 redistricting cycle. The post-treatment period is the 2022 midterm elections, the first set of midterms after the 2020 redistricting cycle. I utilize a DiD regression to acquire more causal leverage to assess whether variations in participation are a result of changes in gerrymandering (changing from a non-gerrymandered district to gerrymandered).

One advantage of this type of model is that I can conduct analysis across two election periods despite major political events like the COVID-19 pandemic, the 2020 Black Lives Matter Protests, and the 2020 presidential election occurring in between, since I do not assume they disproportionately affect the states that have changed whether they gerrymander or not. I believe that assuming parallel trends is fair in this case because these events affected every state across the nation, and gerrymandering was not directly connected to these issues. Nonetheless, since gerrymandering is slightly more common in Republican states, I control for partisanship as a

moderating variable (McCarty et al., 2009). Using this model, I leverage CES datasets to determine whether changes to gerrymandering at a district level impact both conventional and unconventional forms of participation.

Survey Experiment

In the next phase of this project, I conducted my own survey experiment, priming the issue of partisan gerrymandering. The survey was launched on Lucid Theorem to 1,021 respondents.⁵ Lucid Theorem utilizes nationally representative quota-based samples to match US Census demographics for gender, race, age, and region. The survey experiment allows me to analyze the effect of priming messages about living in a gerrymandered district on willingness to engage in conventional and unconventional forms of participation. The survey included seven batteries of questions, shown in Table 4.1. The full text of this survey is included in Appendix 2.

Table 4.1: Survey Experiment Structure		
Part 1: Basic demographic information, partisanship, and ideology		
Part 2: Exposure to vignette (randomly assigned to one of three conditions; each condition has a version for individuals living in a gerrymandered district and those who do not)		
Condition A: No vignette	Condition B: Vignette defining gerrymandering	Condition C: Vignette defining gerrymandering and its partisan impact
Part 3: Emotional response questions		
Part 4: Future willingness to engage politically		
Part 5: Previous political participation		
Part 6: Knowledge of living in a gerrymandered district		
Part 7: Political knowledge		

⁵ This experiment was funded using a \$1,000 grant I was awarded through the Academic Year Undergraduate Research Grant (AYURG) through the Northwestern Office of Undergraduate Research, in addition to funding from the Ginsburg Grant within the Political Science Department.

First, respondents were asked a series of questions about basic demographics, partisanship, ideology, and zip code. From there, respondents were identified as residing in a gerrymandered or a non-gerrymandered district by mapping their zip code to their congressional district and whether this district has a partisan gerrymandering. Because most districts remained consistent between 2022 and 2024, I utilized the calculations from my initial identification of partisan gerrymanders. However, in states that modified congressional districts between 2022 and 2024, I recalculated the efficiency gap to ensure that districts were correctly identified as gerrymandered or not.

Next, respondents received one of three treatment conditions on each of two branches, defined by whether they lived in a partisan gerrymandered district or not. If they lived in a gerrymandered district, they were randomly assigned to a condition where they read no passage, they read about living in a gerrymandered district, or they read about which party is disadvantaged in their gerrymandered district. If they did not live in a gerrymandered district, they were randomly assigned to one of three conditions: one with no passage, one about not living in a gerrymandered district, or one about how no party is disadvantaged in their district.

After they were given their treatment condition, respondents were asked to describe their present emotional state. From there, they rated their past and future willingness to participate in a variety of conventional and unconventional forms. Finally, respondents answered questions about American politics and gerrymandering based on what they know and have read.

Each of these sections plays a distinct role in my analysis. The basic demographic information allows me to assess how well my sample meets population targets on key variables, beyond Lucid's quota-based demographics. These questions also ascertain respondents' geographic data to identify their congressional districts. Next, the vignette serves as a prime to

bring the issue of gerrymandering in their home district to the top of the mind to test hypotheses H1c-f and H2c-f. Then, I measure the intended dependent variables by future engagement in conventional and unconventional forms of participation. Finally, political knowledge serves as a manipulation check to assess whether respondents understood the vignette when it was assigned to them. After conducting this survey experiment, I ran OLS regressions, testing the effect of the treatment on different forms of participation according to hypotheses 1c-f and 2c-f, controlling for whether respondents correctly identified whether they were gerrymandered after treatment.

Chapter 5

Secondary Data Analysis

To determine the relationship between living in a gerrymandered district on conventional and unconventional forms of participation, I employ CES data. From 2018 to 2022, the CES used consistent questions as a part of their “Common Content” that I use to assess how political attitudes and behavior can change over time due to living in a gerrymandered district.

Observational Analysis of CES Data Results

After determining which districts are partisan gerrymanders, I merged a gerrymandering indicator variable with the CES datasets from 2018 and 2022. Since the CES data are cross-sectional, but I am interested in the impact of changes in gerrymandering, I aggregated participation variables at the district level for each election year. This allows me to understand how participation changes in a district after being gerrymandered. For conventional participation, I included voter registration and voting history in the 2018/2022 primary and general elections. This index ranged from 0 to 100, indicating the mean percentage of conventional participation activities among respondents in each district. While these three forms of participation had low inter-item correlation in the CES dataset ($\alpha = 0.36$), scholars commonly rely on them together to consider participation (Highton, 2004). Accordingly, I presume this index is still a reliable indicator of conventional participation and utilize it as my dependent variable to test hypotheses H1a, H2a, H1b, and H2b.

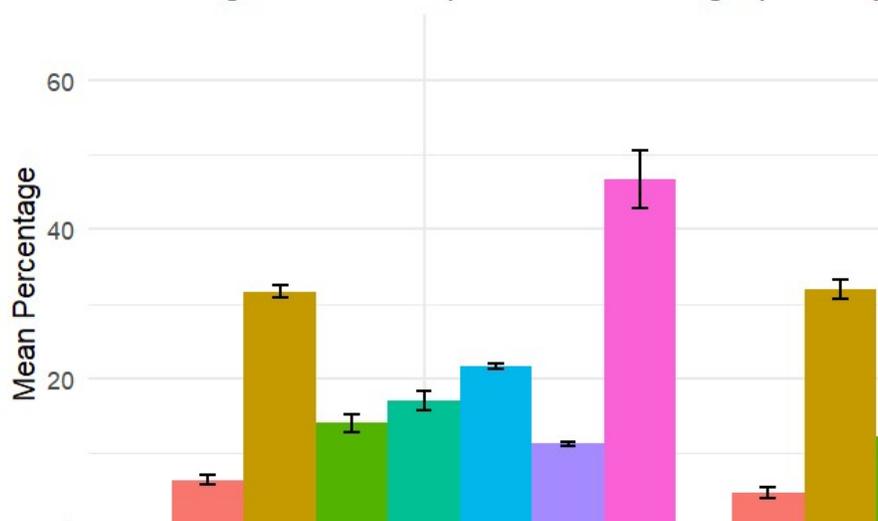
To measure unconventional participation, I created an index combining variables measuring of whether respondents protested, attended public meetings, donated to a political cause, contacted an elected official, and engaged in politics online. The online political engagement

variables accounted for whether individuals posted, commented, read, or forwarded a message about politics online. These measures were all classified as forms of unconventional participation because they involve interaction with at least one other person about political issues. The final index of unconventional participation took values from 0 to 100 and is a consistent and reliable measure of unconventional participation across both survey waves ($\alpha = 0.88$). This measure is also aggregated by district to reflect the mean level of unconventional participation in the district.

After creating a dataset with my independent variable (partisan gerrymandering) and my dependent variables (the conventional and unconventional participation indices), I added several control variables. First, using Census data, I added variables measuring the demographic characteristics of each district, including race, economic status, age, and education. Additionally, I included a variable indicating the partisanship of each district using the previous presidential election's results.

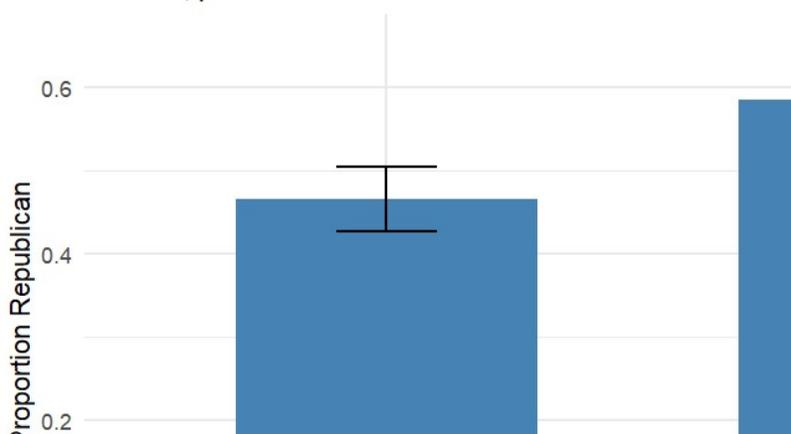
Most demographic characteristics are consistent between gerrymandered and non-gerrymandered districts. As shown in Figure 5.1, there is no gap in the percentage of those below the poverty line, over 65 years old, with a bachelor's degree, and who identify as Black or Hispanic between gerrymandered and non-gerrymandered districts. Noticeably, the proportion of Asian Americans in gerrymandered districts appears to be slightly lower. This could be because many states that engage in gerrymandering have lower Asian American populations, particularly those in the East and Midwest.

Figure 5.1: Comparison of Demographics by



The feature that varies the most across gerrymandered and non-gerrymandered districts is the percentage of Republicans. Because partisanship is closely tied to political behavior within a district, I perform a Welch t-test to determine whether there are different partisan distributions in gerrymandered and non-gerrymandered districts. I find that in gerrymandered districts, Republicans account for 58.6% of voters, and in non-gerrymandered districts, 46.6% of voters. There is a significant difference between the percentage of Republicans at the 0.01 significance level. The results of this test, shown in Figure 5.2, suggest that gerrymandered districts are more likely to have Republicans.

Figure 5.2: Mean Party Value by Gerrymandering

 $t = -2.97, p = 0.0032$


Participation Levels in Gerrymandered and Non-Gerrymandered Districts

Next, I turn to comparing participation in gerrymandered and non-gerrymandered districts. These initial analyses explore the descriptive relationships between my variables of interest; the subsequent analyses leverage difference-in-difference estimates to provide more causal insights. I regress conventional and unconventional participation on gerrymandered status. The regressions also control for year so that variation in year-to-year election turnout does not influence differences between districts. The first model includes an indicator for whether the district is gerrymandered and year, while the second includes controls for race, education, poverty, and age, and the third adds a control for partisanship. The general model of this OLS regression is shown in Equation 5.1, where *gerry* is 1 for gerrymandered districts and 0 for non-gerrymandered districts:

$$y_{it} = \beta_0 + \delta_1 \mathbb{1}[i = \text{gerry}] + \delta_2 \mathbb{1}[t = 2022] + X\beta + u \quad (\text{Eqn. 5.1})$$

The results for conventional participation are shown in Table 5.1. I find that absent demographic controls, there is no evidence of a difference in participation levels between gerrymandered and non-gerrymandered districts. However, when accounting for demographic factors, there is evidence of lower conventional participation in gerrymandered districts. Substantively, a partisan gerrymandered district has 0.8 percentage point lower participation. While these findings are merely descriptive and do not provide inferential evidence, they indicate that there are differences in participation at the district level that may be explained by gerrymandering.

Table 5.1: Regressing Conventional Participation on Gerrymandering

	<i>Dependent variable:</i>		
	Voter Turnout (%)		
	Base Model (1)	Demographic Controls (2)	Demographic + Partisan Controls (3)
Partisan Gerrymander	-0.559 (0.546)	-0.940* (0.527)	-0.901* (0.526)
Year	-2.475*** (0.464)	-2.801*** (0.453)	-2.740*** (0.454)
% White		-0.018 (0.016)	-0.007 (0.017)
% Bachelors Degree		0.068** (0.028)	0.055* (0.029)
% Poverty Rate		-0.417*** (0.083)	-0.429*** (0.083)
% Over 65 Years Old		0.125* (0.063)	0.133** (0.064)
Republican District			-0.908* (0.543)
Constant	78.818*** (0.349)	80.138*** (2.473)	80.090*** (2.471)
Observations	835	835	835
R ²	0.035	0.124	0.127
Adjusted R ²	0.032	0.118	0.120
Residual Std. Error	6.704 (df = 832)	6.399 (df = 828)	6.392 (df = 827)
F Statistic	14.872*** (df = 2; 832)	19.618*** (df = 6; 828)	17.251*** (df = 7; 827)
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01

When evaluating unconventional participation, there are also differences between gerrymandered and non-gerrymandered districts. While I hypothesize that gerrymandering will cause unconventional participation to increase, the descriptive analysis depicted in Table 5.2 shows that unconventional participation levels are more than one percentage point lower in gerrymandered districts. Accordingly, these results warrant further analysis using a difference-in-differences model to determine whether a non-gerrymandered district becoming gerrymandered influences political participation.

Table 5.2: Regressing Unconventional Participation on Gerrymandering

	<i>Dependent variable:</i>		
	Voter Turnout (%)		
	Base Model (1)	Demographic Controls (2)	Demographic + Partisan Controls (3)
Partisan Gerrymander	-1.004*** (0.338)	-1.135*** (0.298)	-1.123*** (0.298)
Year	-5.725*** (0.287)	-6.090*** (0.256)	-6.070*** (0.257)
% White		0.045*** (0.009)	0.048*** (0.010)
% Bachelors Degree		0.214*** (0.016)	0.210*** (0.016)
% Poverty Rate		0.129*** (0.047)	0.125*** (0.047)
% Over 65 Years Old		-0.040 (0.036)	-0.038 (0.036)
Republican District			-0.300 (0.308)
Constant	24.500*** (0.216)	14.084*** (1.399)	14.068*** (1.399)
Observations	835	835	835
R ²	0.330	0.492	0.493
Adjusted R ²	0.328	0.489	0.489
Residual Std. Error	4.148 (df = 832)	3.619 (df = 828)	3.619 (df = 827)
F Statistic	204.550*** (df = 2; 832)	133.844*** (df = 6; 828)	114.852*** (df = 7; 827)
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01

Hypotheses 1a and 2a

Next, I utilize the changes produced by the 2020 redistricting cycle to understand how participation in districts that were non-gerrymandered in 2018 changed in 2022, depending on whether they became gerrymandered before the 2022 elections. To do so, I focus on the subset of districts that were not gerrymandered in 2018 and their corresponding districts in the 2022 elections. These districts were matched by pairing incumbents who were in Congress in 2018 with their respective districts and assessing the geographic overlap between 2018 and 2022 districts. When determining the corresponding districts, there were a few cases where reapportionment affected the ability to pair districts across years. Six states gained a congressional district, and seven states lost districts. In these states, added or eliminated districts

were not paired with a district in the other cycle, and they were dropped from the analysis. In total, this removed fourteen districts from my analysis: seven in 2018 and seven in 2022.

Otherwise, all non-gerrymandered districts in 2018 were paired with their analogue in 2022, for a total of 318 districts.

A difference-in-difference approach to this panel data provides greater leverage on the question of whether gerrymandering has a causal effect on participation. For this analysis, any district that became gerrymandered before the 2022 election cycle (but after the 2018 election cycle) was classified as treated. To test hypotheses H1a and H2a, the relationship between becoming gerrymandered and participation, each observation within the panel is identified by whether it is pre- or post-treatment (t) and whether it receives the treatment (i). The model also incorporates the same demographic and partisan control variables (X_{it}) to account for other factors that may have changed within individual districts between $t = 0$ (2018) and $t = 1$ (2022). The full model is shown in Equation 5.2.

$$y_{it} = \beta_0 + \delta_0 \mathbb{1}[t = 2022] + \delta_1 \mathbb{1}[i = \text{treated}] + \delta_2 \mathbb{1}[i = \text{treated}] \mathbb{1}[t = 2022] + X_{it} \beta + u \quad (\text{Eqn. 5.2})$$

In this model, a few key assumptions must hold. First, there must be parallel trends between the treated and untreated groups before gerrymandering took place. This means that any change in participation in districts that remained gerrymandered from 2018 to 2022 would be consistent with the change in participation in districts that were not gerrymandered from 2018 to 2022 before 2020 redistricting. I assume that parallel trends hold because there has not been any evidence that other motivators of political behavior disproportionately affect those living in gerrymandered districts other than those living in that district.

The second assumption in this model is the exogeneity of whether a district becomes gerrymandered. In my model, it is possible that changes to demographics within a district

between 2018 and 2022 can cause legislators to gerrymander that district while also affecting participation levels. To remedy this problem, I account for multiple control variables to ensure that the error is exogenous is a fair assumption. I first control for the partisanship of the district. Partisan gerrymandering definitionally indicates that the partisanship within a district may change. Accordingly, if one party is more mobilized by gerrymandering than another, this effect may be picked up by the estimator of the effect of gerrymandering. To solve this problem, I incorporate an indicator variable for whether a district has a Republican majority. The models also control for variables commonly associated with participation, including education, race, income, and age. These measures can also change within a district due to gerrymandering and are correlated with participation, so they must be included within the regression model. Given that these core variables influencing participation have been accounted for, there are minimal concerns about other omitted variables that could inhibit exogeneity.

Table 5.3 presents the results of the difference-in-difference models for conventional participation. Model 1 is the simplest regression without control variables, Model 2 is a regression with control variables, and Model 3 is a regression with an additional partisan control. All three models find no evidence of gerrymandering affecting conventional forms of participation, with all coefficients for the gerrymandering term equaling nearly zero. This suggests that among districts that were not gerrymandered in 2018, formal engagement with elections did not change within districts because they became gerrymandered prior to the 2022 elections.

Table 5.3: DiD Regression of Conventional Participation on Gerrymandering

	<i>Dependent variable:</i>		
	Voter Turnout (%)		
	Base Model (1)	Demographic Controls (2)	Demographic + Partisan Controls (3)
Partisan Gerrymander	0.528 (0.852)	-0.044 (0.820)	-0.005 (0.816)
Year	-2.588*** (0.600)	-3.127*** (0.581)	-3.009*** (0.579)
% White		-0.032* (0.017)	-0.008 (0.019)
% Bachelors Degree		0.084*** (0.030)	0.061** (0.031)
% Poverty Rate		-0.365*** (0.094)	-0.393*** (0.094)
% Over 65 Years Old		0.181*** (0.067)	0.191*** (0.067)
Republican District			-1.697*** (0.622)
Partisan Gerrymander*Year	0.026 (1.206)	0.136 (1.149)	0.073 (1.144)
Constant	79.193*** (0.423)	79.338*** (2.621)	79.190*** (2.608)
Observations	630	630	630
R ²	0.039	0.133	0.143
Adjusted R ²	0.034	0.123	0.132
Residual Std. Error	6.531 (df = 626)	6.223 (df = 622)	6.191 (df = 621)
F Statistic	8.464*** (df = 3; 626)	13.637*** (df = 7; 622)	12.986*** (df = 8; 621)
<i>Note:</i>			* p<0.1; ** p<0.05; *** p<0.01

Table 5.4 presents similar models for unconventional participation. Once again, I find no causal relationship between partisan gerrymandering and participation, with estimators hovering close to zero and there being no significant relationship. Given the results in Tables 5.3 and 5.4 that do not detect any relationship between living in a gerrymandered district and either form of political gerrymander, I conclude that the evidence does not support hypotheses H1a or H2a.

Table 5.4: DiD Regression of Unconventional Participation on Gerrymandering

	<i>Dependent variable:</i>		
	Voter Turnout (%)		
	Base Model (1)	Demographic Controls (2)	Demographic + Partisan Controls (3)
Partisan Gerrymander	-0.079 (0.557)	-0.252 (0.488)	-0.239 (0.488)
Year	-5.972*** (0.391)	-6.520*** (0.345)	-6.484*** (0.346)
% White	0.026*** (0.010)	0.045*** (0.010)	0.053*** (0.011)
% Bachelors Degree		0.216*** (0.018)	0.209*** (0.018)
% Poverty Rate		0.137** (0.056)	0.129** (0.056)
% Over 65 Years Old		-0.024 (0.040)	-0.021 (0.040)
Republican District			-0.527 (0.372)
Partisan Gerrymander*Year	-0.213 (0.785)	-0.137 (0.684)	-0.156 (0.683)
Constant	22.867*** (0.761)	13.857*** (1.560)	13.811*** (1.559)
Observations	630	630	630
R ²	0.348	0.507	0.509
Adjusted R ²	0.344	0.502	0.502
Residual Std. Error	4.250 (df = 625)	3.703 (df = 622)	3.700 (df = 621)
F Statistic	83.313*** (df = 4; 625)	91.437*** (df = 7; 622)	80.388*** (df = 8; 621)

Note: * p<0.1; ** p<0.05; *** p<0.01

Hypotheses 1b and 2b

Next, I turn to measure whether this relationship only holds for members of the politically disadvantaged parties (hypotheses H1b and H2b). While hypotheses H1a and H2a aggregated participation levels by district and year, the CES dataset for hypotheses H1b and H2b aggregates participation levels by district, year, and whether respondents are aligned with the disadvantaged party in their district, reflected by a {0,1} indicator variable. In testing these hypotheses, I run the same regression model, but this time with a triple interaction term. This term interacts time

(t), treatment (i), and whether the respondent belongs to the disadvantaged party (p), as shown in Equation 5.3.

$$\begin{aligned}
 y_{itp} = & \beta_0 + \delta_0 \mathbb{1}[t = 2022] + \delta_1 \mathbb{1}[i = \text{treated}] + \\
 & \delta_2 \mathbb{1}[p = \text{disadvantaged}] + \delta_3 \mathbb{1}[i = \text{treated}] \mathbb{1}[t = 2022] + \\
 & \delta_4 \mathbb{1}[i = \text{treated}] \mathbb{1}[p = \text{disadvantaged}] + \delta_5 \mathbb{1}[p = \text{disadvantaged}] \mathbb{1}[t = 2022] + \\
 & \delta_6 \mathbb{1}[i = \text{treated}] \mathbb{1}[p = \text{disadvantaged}] \mathbb{1}[t = 2022] + X_{itp} \beta + u \quad (\text{Eqn. 5.3})
 \end{aligned}$$

In these models, δ_3 and δ_6 are the key terms of interest. The coefficient δ_3 measures the change in participation because of gerrymandering among those who do not belong to the disadvantaged party. The coefficient δ_6 measures the change in participation due to gerrymandering among those who belong to the disadvantaged party.

I test the relationship between gerrymandering and conventional participation using party as a moderating variable. The results of these regressions are shown in Table 5.5. These regressions all indicate that belonging to the disadvantaged party does not differentially affect whether voters conventionally participate in gerrymandered districts. This provides further evidence that gerrymandering did not shape how Americans chose to vote in the 2022 elections. Those who were systematically disadvantaged by gerrymandering in districts were no less likely to vote than those with other partisan identifications whose districts were gerrymandered.

Table 5.5: DiD Regression with Triple Interaction Term: Conventional Participation

	Dependent variable:		
	Voter Turnout (%)		
	Base Model (1)	Demographic Controls (2)	Demographic + Partisan Controls (3)
Partisan Gerrymander	0.028 (0.560)	-0.619 (0.545)	-0.596 (0.543)
Year	-1.796*** (0.395)	-2.333*** (0.385)	-2.212*** (0.385)
Disadvantaged Party	4.822*** (0.394)	4.822*** (0.382)	4.822*** (0.380)
Gerrymander x Year (δ_3)	0.178 (0.792)	0.273 (0.767)	0.221 (0.765)
Gerrymander x Disadvantaged	1.656** (0.792)	1.656** (0.767)	1.656** (0.764)
Year x Disadvantaged	-2.999*** (0.558)	-2.999*** (0.541)	-2.999*** (0.539)
Gerrymander x Year x Disadvantaged (δ_6)	-1.327 (1.120)	-1.327 (1.085)	-1.327 (1.082)
Constant	77.771*** (0.279)	76.977*** (1.247)	76.845*** (1.243)
Demographic Controls		X	X
District Partisanship Controls			X
Observations	5,184	5,184	5,184
R ²	0.084	0.141	0.147
Adjusted R ²	0.083	0.139	0.145
Residual Std. Error	8.714 (df = 5176)	8.441 (df = 5172)	8.412 (df = 5171)
F Statistic	67.763*** (df = 7; 5176)	77.329*** (df = 11; 5172)	74.374*** (df = 12; 5171)

Note:

* p<0.1; ** p<0.05; *** p<0.01

Similar trends hold for unconventional participation. As shown in Table 5.6, neither the δ_3 nor the δ_6 coefficients were positive and significant. This indicates that belonging to a disadvantaged party and becoming recently gerrymandered did not lead to a change in unconventional participation. Accordingly, these results of these two sets of regressions do not support H1b or H2b. There does not appear to be a relationship between belonging to a disadvantaged party in a gerrymandered district and participation levels.

Table 5.6: DiD Regression with Triple Interaction Term: Unconventional Participation

	<i>Dependent variable:</i>		
	Base Model (1)	Voter Turnout (%)	
		Demographic Controls (2)	Demographic + Partisan Controls (3)
Partisan Gerrymander	-0.225 (0.434)	-0.319 (0.426)	-0.341 (0.424)
Year	-6.186*** (0.306)	-6.525*** (0.301)	-6.638*** (0.300)
Disadvantaged Party	-0.340 (0.304)	-0.340 (0.298)	-0.340 (0.297)
Gerrymander x Year (δ_3)	-0.399 (0.612)	-0.349 (0.599)	-0.301 (0.596)
Gerrymander x Disadvantaged	-0.170 (0.612)	-0.170 (0.599)	-0.170 (0.596)
Year x Disadvantaged	0.816* (0.431)	0.816* (0.422)	0.816* (0.420)
Gerrymander x Year x Disadvantaged (δ_6)	0.862 (0.866)	0.862 (0.847)	0.862 (0.843)
Constant	19.833*** (0.445)	14.082*** (0.974)	14.205*** (0.969)
Demographic Controls		X	X
District Partisanship Controls			X
Observations	5,184	5,184	5,184
R ²	0.185	0.220	0.227
Adjusted R ²	0.184	0.218	0.225
Residual Std. Error	6.733 (df = 5175)	6.591 (df = 5172)	6.560 (df = 5171)
F Statistic	147.043*** (df = 8; 5175)	132.289*** (df = 11; 5172)	126.717*** (df = 12; 5171)

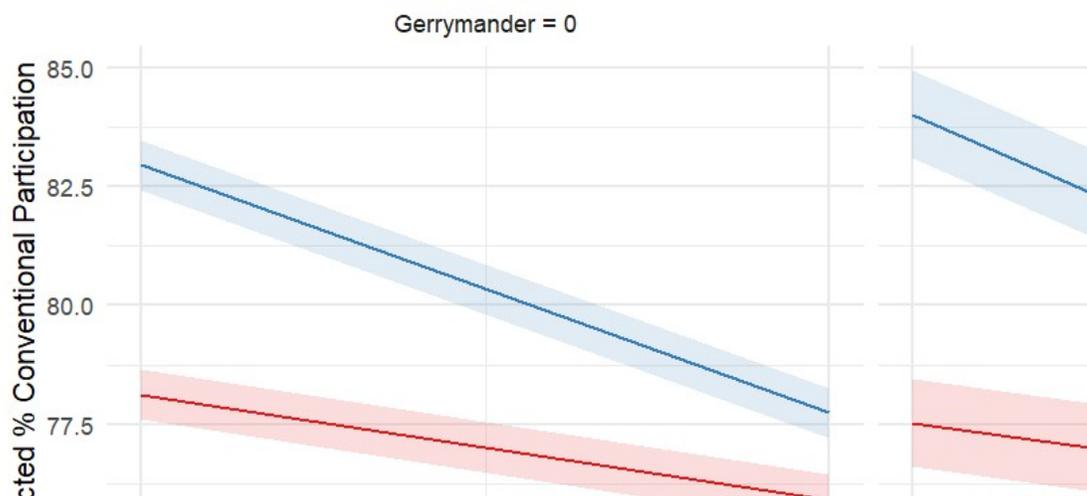
Note:

* p<0.1; ** p<0.05; *** p<0.01

However, while there is no significant relationship between the interaction terms and conventional or unconventional participation, the direction of the coefficients is different for those who are a part of the disadvantaged party versus not. To unpack whether belonging to the disadvantaged party has a marginal effect on participation, I plot the relationship between year and political participation for districts that are gerrymandered (treated) and not, and for respondents associated with the disadvantaged party and not. To do so, I first evaluate the marginal effect of belonging to the disadvantaged party on the relationship between year and conventional participation.

Figure 5.3 shows the relationship between belonging to the disadvantaged party on the predicted percentage of conventional participation engagement. The x-axis represents the year, where 0 represents the last election before redistricting and 1 represents the election after redistricting.⁶ The left side of the figure represents districts that did not become gerrymandered before the 2022 midterms, and the right side represents the districts that did. Blue lines indicate trends among those belonging to the disadvantaged party, and red lines indicate trends among those who do not belong to the disadvantaged party. Across the board, belonging to the disadvantaged party decreased participation levels more steeply than those who were not disadvantaged between 2018 and 2022. Table 5.7 shows how the difference in the relationship between time and participation was significantly higher among disadvantaged parties, regardless of gerrymandering. However, the slope was nearly 1.3 percentage points steeper for those who became gerrymandered in 2022. This suggests that belonging to the disadvantaged party has a stronger, negative effect on participation over time in gerrymandered districts.

Figure 5.3: Marginal Effects of Belonging to Disadvanta



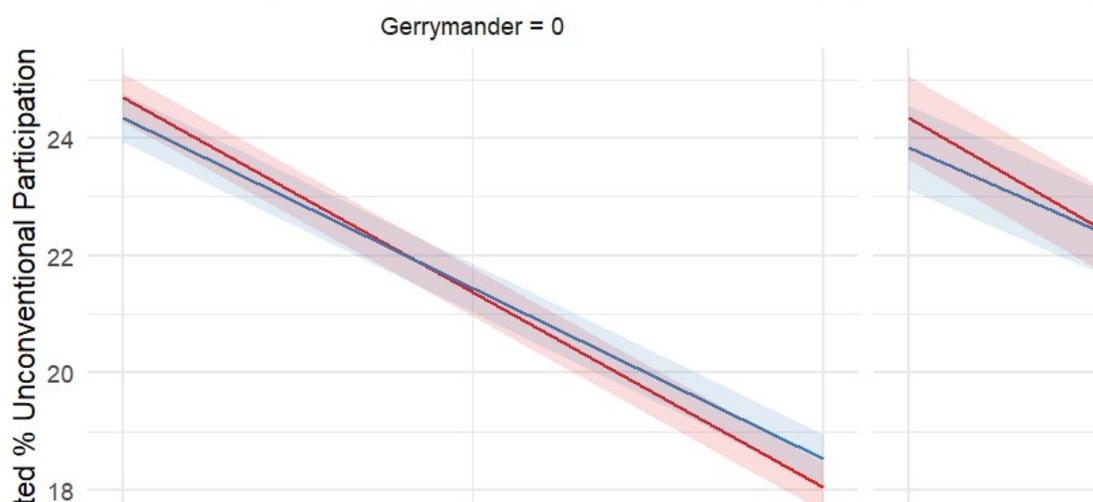
⁶ While Figures 5.3 and 5.4 show a continuous line across all values of year from 0 to 1 for ease of presentation, year is a discrete variable that solely takes values at 0 and 1.

**Table 5.7: Difference in Year Slopes by Disadvantaged Status:
Conventional Participation**

Gerrymander	contrast	estimate	SE	df	t.ratio	p.value
0	pdisadv0 - pdisadv1	2.999	0.539	5171	5.564	<0.001
1	pdisadv0 - pdisadv1	4.326	0.938	5171	4.614	<0.001

Figure 5.4 presents the same analysis on unconventional participation. In this case, the difference in the slopes of those who do and do not belong to the disadvantaged party is not as pronounced. As demonstrated in Table 5.8, the difference between year slopes of disadvantaged and non-disadvantaged party members in non-gerrymandered districts is not significant at the 0.05 level. However, members of the disadvantaged party exhibited a smaller decrease in unconventional participation compared to those who did not belong to that party in gerrymandered districts. This suggests that while there were general downtrends in unconventional participation between 2018 and 2022, this decrease was not as steep for members of the disadvantaged party in districts that became gerrymandered.

Figure 5.4: Marginal Effects of Belonging to Disadvantaged



**Table 5.8: Difference in Year Slopes by Disadvantaged Status:
Unconventional Participation**

Gerrymander	contrast	estimate	SE	df	t.ratio	p.value
0	pdisadv0 - pdisadv1	-0.816	0.420	5171	-1.941	0.0523
1	pdisadv0 - pdisadv1	-1.678	0.731	5171	-2.295	0.0218

This analysis complicates the findings from the regressions measuring the triple interaction between becoming gerrymandered, year, and belonging to the disadvantaged party. Belonging to the disadvantaged party and becoming gerrymandered leads to a steeper decrease in conventional participation compared to those with other partisan affiliations. This provides some support for hypothesis H1b. Similarly, belonging to the disadvantaged party and becoming gerrymandered leads to a smaller decrease in conventional participation compared to those with other partisan affiliations. While this does not support hypothesis H2b (that belonging to the disadvantaged party increases unconventional participation), it suggests that the negative relationship between the 2022 midterm elections and unconventional participation was weakened by membership in a party disadvantaged by gerrymandering.

Limitations

The absence of a direct relationship between gerrymandering and participation in these models warrants reconsidering my hypotheses. Ultimately, the lack of statistically significant results could be caused by issues in identifying gerrymandered districts and sample size or the absence of the hypothesized relationship.

First, noise in my estimates may have affected the strength of the effect I sought to measure. When developing this dataset, I aggregated CES data by congressional district to get measures of participation at the district level. While the CES Common Content contains approximately 50,000 respondents, when divided across all 435 districts, this averages to slightly more than 100

respondents per district. Because measures of participation were aggregated at the district level, this relatively low number of observations at the district level, especially in some districts, could lead to noisy measures of district-level participation. Second, given that the unit of analysis is the congressional district, the number of observations in the regression model is limited to the number of districts. However, since districts that were gerrymandered in 2018 are excluded from this analysis, the dataset is reduced to 318 districts in each election year. It is possible that this reduced number of observations could have made it harder to detect an effect.

While it is possible that limitations in my research hindered the identification of statistically significant results, it is also possible that gerrymandering simply does not influence participation, leading to no detected change. Furthermore, particularities within this dataset could illustrate the absence of an effect only in certain contexts. First, this analysis is only performed on districts that were not gerrymandered in 2018. It is possible that gerrymandering does not influence political behavior in recently gerrymandered districts, but it does affect political behavior in districts with longstanding histories of gerrymandering as people become more and more discouraged from participating because they see no changes in party control or ousting of incumbent members. This effect would not be captured by these regressions as they only account for recent gerrymandering. Furthermore, it is possible that these respondents did not know that they were in a gerrymandered district. Many Americans have low levels of political knowledge, and gerrymandering is an obscure political topic, so it is feasible that most Americans do not know whether their district is gerrymandered (Carpini & Keeter, 1996). Accordingly, if individuals do not know that they live in a gerrymandered district, it is unlikely that partisan gerrymandering will shape their political behavior. Given that the CCES does not account for whether individuals are aware of whether they live in an affected district, I conduct a survey

experiment that seeks to measure whether knowing about partisan gerrymandering influences political behavior.

Chapter 6

Survey Experiment Analysis

To test the remaining hypotheses, I conducted a survey in Lucid Theorem that captured how learning about living in a gerrymandered district influenced political participation levels. I surveyed 1225 respondents from February 26th to March 1st, 2025. Of those 1225 respondents, 204 either did not complete the survey or entered zip codes that did not pair with zip codes in one of the fifty states. Accordingly, I performed my analysis on 1021 Americans. Across this sample, demographic characteristics were consistent with the US Population. A summary of the demographic characteristics of my survey population is included in Appendix 3. After conducting the survey, approximately 34% of respondents were identified as living in a gerrymandered district, and 62% did not live in a gerrymandered district. Furthermore, using random assignments, 67% of all respondents were assigned to a treatment condition, including a passage. Among those assigned to a treatment, 50% (or 33% of all respondents) were given a passage that describes gerrymandering and whether it happens in the respondent's district. The other 50% of treated respondents were given a passage describing gerrymandering, whether it happens in the respondent's district, and which party was disadvantaged by gerrymandering in their district, if at all. The remaining 33% of respondents who did not receive a treatment passage constituted the control group. The median time it took to complete the survey was 4 minutes and 27 seconds.

Isolating Variables and Assessing Attentiveness

In the survey, respondents indicated how willing they were to engage in a range of conventional and unconventional political activities in the next year. These questions were asked

after respondents in the treatment conditions received a passage discussing gerrymandering to see whether priming gerrymandering in their district changed their willingness to participate. To measure conventional participation, I combined the likelihood of voting in the primary and general elections for the 2026 midterms, and these two variables were internally consistent ($\alpha = 0.84$). Building of the CES unconventional participation variables, I measured willingness to protest, post a political message in the next year, contact an elected official, sign a petition, and donate to a political cause in the next year. This aggregated variable for unconventional participation was also internally consistent ($\alpha = 0.85$).

A manipulation check near the end of the survey allows me to assess whether the treatments were effective in helping respondents understand whether they lived in a partisan gerrymandered district or not. This question asked respondents whether they lived in a gerrymandered district, and respondents had an option to choose “Yes,” “No,” or “Not Sure.” After respondents received a passage, I expected them to be more likely to correctly identify whether they lived in a partisan gerrymander or not. While 46.8% of respondents who received a passage correctly identified what type of district they lived in, only 30.7% of respondents who did not receive a passage correctly identified their district. I conducted a t-test of differences in means between these two values, identifying a difference between knowledge of whether one’s district is gerrymandered after receiving a treatment condition at the 0.05 significance level. While this means that the treatment did affect respondents’ knowledge levels, 46.8% accuracy after being explicitly told whether one’s district is gerrymandered is less than ideal. Given that rates were low for identifying whether one’s district is gerrymandered, I list their accuracy in Table 6.1. Because the treatment appears to have only worked for some respondents, I conducted two regressions to

test hypotheses 1c, 2c, 1d, 2d, 1f, and 2f. One measures whether they received the treatment, and one measures whether that treatment was successful.

Table 6.1: Accuracy and Speediness of Survey Respondents			
Set of Respondents	Percent Identifying Gerrymandering Status Correctly	Median Time Spent on Passage	Median Time Spent on Survey
Gerrymandered participants in control condition	20.69%	N/A	280 seconds
Gerrymandered participants told about district gerrymandering	30.58%	28.03 seconds	266.5 seconds
Gerrymandered participants told about district gerrymandering and partisan disadvantage	34.40%	36.17 seconds	276 seconds
Non-gerrymandered participants in control condition	35.94%	N/A	219 seconds
Non-gerrymandered participants told about district gerrymandering	47.31%	27.32 seconds	284 seconds
Non-gerrymandered participants told about absence of district gerrymandering and that no party in their district is disadvantaged	59.47%	36.07 seconds	292.5 seconds

To test hypotheses 1c, 2c, 1f, and 2f, I first regress participation levels on whether the respondent received a passage. Next, to account for successful and unsuccessful treatment, I run a second model with two independent variables. First, I include an indicator variable of whether someone received a passage and correctly identified whether they live in a gerrymander. Second, I include an indicator of whether someone received a passage and incorrectly identified whether they live in a gerrymander. This means that the control coefficient will represent the willingness to participate among those in the control group, and the coefficient on the correct identification indicator variable will represent the effect of the passage on the attentive respondent group.

Hypotheses 1d and 2d are tested using only respondents in gerrymandered districts who received a passage. In this case, the treated group consists of respondents who read the passage

priming partisan disadvantage (the control is reading a passage about partisan gerrymandering that does not mention which party is hurt). In the first regression for these hypotheses, whether the respondent received the passage discussing partisanship is the sole independent variable. The second regression includes two indicator variables to measure treatment. The first variable measures whether the respondent received the partisan-specific passage and remembered the disadvantaged party. The second variable measures whether the respondent received the partisan-specific passage and incorrectly remembered the disadvantaged party.

Similarly, Hypotheses 1e and 2e are tested among respondents in gerrymandered districts who received a passage about gerrymandering, and the treatment group includes respondents who were told about the disadvantaged party. In this case, the independent variables capturing treatment are interacted with a variable indicating identification with the disadvantaged parties. The first regression for these hypotheses interacts the variable for belonging to the disadvantaged party and whether respondents received the passage priming the disadvantaged party. The second regression interacts identification with that disadvantaged party and each of the two attention-based independent variables from Hypotheses H1d and H2d.

Emotional Responses to Treatment Conditions

To further understand how respondents reacted to the different stimuli, the survey asked each respondent “How do you feel about how politics may shape the way your congressional district is drawn?” Respondents could select up to eight different emotions: sad, worried, calm, excited, frustrated, relieved, mad, hopeful, and motivated. If respondents selected sad, worried, frustrated, or mad, they were characterized as having a negative emotional reaction to how politics affect redistricting in their district. If respondents selected calm, excited, hopeful, or relieved, they were characterized as having a positive emotional reaction to how politics affect redistricting in their

district. Finally, respondents selecting “motivated” were characterized as having a motivated response. Emotional responses by each treatment condition are listed in Table 6.2.

Table 6.2: Emotional Responses to Treatment

	% Indicating Positive Emotions	% Indicating Negative Emotions	% Indicating Motivation
Gerrymandered, Control	28.57 (4.16)	32.77 (4.32)	1.68 (1.18)
Gerrymandered, Gerrymandering Passage	20.21 (4.16)	41.49 (5.11)	1.06 (1.06)
Gerrymandered, Gerrymandering + Advantaged Party Passage	25.56 (3.8)	30.08 (3.99)	3.76 (1.66)
Not Gerrymandered, Control	29.68 (3.09)	26.03 (2.97)	4.11 (1.34)
Not Gerrymandered, Gerrymandering Passage	21.96 (2.84)	31.31 (3.18)	2.8 (1.13)
Not Gerrymandered, Gerrymandering + Advantaged Party Passage	30.58 (2.97)	30.17 (2.96)	2.07 (0.92)

For respondents in gerrymandered districts, positive emotions decreased when receiving one of the two treatment conditions. Similarly, negative emotions were higher when respondents were told that they lived in a gerrymandered district, but slightly lower among the treatment group that was told which party was disadvantaged in their district. For respondents in non-gerrymandered districts, positive emotions were lower when respondents learned that they were not gerrymandered, but they were not lower when respondents were told that no party was disadvantaged in their district. Negative emotions were slightly higher among the treatment groups for non-gerrymandered districts. Few respondents selected motivation as an emotional response to redistricting in their district. Motivation was slightly higher among non-gerrymandered respondents, but there was no clear relationship between treatment conditions and identifying with this emotion. Overall, t-tests suggested that emotion levels were not significantly different across those living in gerrymandered and non-gerrymandered districts.

Descriptive Participation Statistics

Next, I seek to understand descriptive variations between past participation in gerrymandered and non-gerrymandered districts. I conduct this descriptive analysis before testing my causal hypotheses with prospective participation to understand existing differences between the districts that I identified as gerrymandered or not. I first look at trends between gerrymandering and past participation. Past conventional participation was measured by whether respondents voted in the past three elections: the 2022 midterms, the 2024 primary, and the 2024 general. Scores on this variable ranged from 0 to 3, indicating how many elections respondents voted in. For unconventional participation, respondents indicated how many engaged in forms of unconventional participation in the past year on a scale from 0 to 5. The unconventional index is the average score across four types of participation: petition-signing, protesting, donating, and contacting elected officials, with higher scores indicating more unconventional participation. As shown in Table 6.3, previous unconventional participation did not vary based on whether respondents lived in a gerrymandered district. Conventional participation was only slightly higher in non-gerrymandered districts. While this analysis cannot establish causal relationships as it uses participation before the treatment, it helps to unpack the inherent differences between gerrymandered and non-gerrymandered districts. This suggests that while there may not be a relationship with merely residing in a gerrymandered district and prior participation, results from the survey experiment could indicate an effect from being reminded about how gerrymandering affects politics within one's district.

Table 6.3: Mean Past Participation Levels Based on District Characteristics

	Conventional Participation Scores [0:3]	Unconventional Participation Scores [0:5]
Gerrymandered	1.56	2.15
Not Gerrymandered	1.7	2.15

Hypotheses 1c and 2c: Effect of Receiving a Passage About Gerrymandering

To test hypotheses 1c and 2c, I subset the data to include only respondents who lived in a gerrymandered district. I then created a binary variable to indicate whether respondents were assigned either of the two treatment conditions. In the first treatment condition, respondents were told what gerrymandering is and that they lived in a gerrymandered district. In the second treatment condition, respondents received the entire passage included in the first treatment in addition to a discussion about which party was disadvantaged by being gerrymandered in their district. In addition to the indicator variable measuring whether respondents were treated, I created two more indicator variables. One variable identified respondents who received a passage and positively identified their district as gerrymandered, and one variable identified respondents who received a passage and incorrectly did not identify their district as gerrymandered. To test hypothesis 1c, I regressed an index from 0 to 5 measuring willingness to conventionally participate on my two conceptualizations of receiving the treatment. To test hypothesis 2c, I ran two similar regressions utilizing a 0 to 5 index aggregating willingness to participate unconventionally. The results of these regressions are shown in Table 6.4.

Table 6.4: Hypotheses 1c and 2c

	<i>Dependent variable:</i>			
	Conventional		Unconventional	
	(1)	(2)	(3)	(4)
Received a Passage	-0.035 (0.131)		-0.008 (0.124)	
Correctly Answered After Passage		0.221 (0.171)		0.438*** (0.160)
Incorrectly Answered After Passage		-0.165 (0.141)		-0.259* (0.132)
Constant	4.072*** (0.105)	4.091*** (0.105)	2.627*** (0.100)	2.652*** (0.098)
Observations	333	326	333	326
R ²	0.0002	0.017	0.00001	0.059
Adjusted R ²	-0.003	0.011	-0.003	0.054
Residual Std. Error	1.146 (df = 331)	1.127 (df = 323)	1.085 (df = 331)	1.051 (df = 323)
F Statistic	0.070 (df = 1; 331)	2.761* (df = 2; 323)	0.004 (df = 1; 331)	10.211*** (df = 2; 323)

Note:

*p<0.1; **p<0.05; ***p<0.01

These regressions suggest that there is no effect between correctly or incorrectly remembering the passage's takeaway on conventional participation. This provides evidence against hypothesis 1c. For unconventional participation, there are noticeable differences. For respondents who received a passage and correctly identified themselves as living in a gerrymandered district, there is a significant increase in willingness to participate. Similarly, for those who received the passage but incorrectly responded, willingness to unconventionally participate is significantly lower. Given that respondents who correctly identify the message of the treatment experience increased levels of participation, there is evidence supporting hypothesis 2c.

Hypotheses 1d and 2d: Effect of Receiving a Party-Specific Passage

Hypotheses 1d and 2d test whether being told which party was disadvantaged in your district affected willingness to participate. To test these hypotheses, I subset the data to include only those who lived in a gerrymandered district *and* received one of the two passage options. In this

model, the treatment is whether respondents received the passage discussing the disadvantaged party. The dependent variables remain the same: 0 to 5 indices measuring willingness to participate conventionally or unconventionally. Similarly, there are two conceptions of the independent variable for each type of participation. First, I utilize a binary variable measuring whether the respondent received the party-specific passage. Second, I utilize a second manipulation check question asking respondents to identify which party was disadvantaged by gerrymandering within their district. Using this information, I create two more indicator variables. One measures whether respondents received the party-specific passage and correctly identified the disadvantaged party. The other measures whether respondents received the party-specific passage and incorrectly identified the disadvantaged party. The results of these regressions are shown in Table 6.5.

Table 6.5: Hypotheses 1d and 2d

	<i>Dependent variable:</i>			
	Conventional		Unconventional	
	(1)	(2)	(3)	(4)
Told Disadvantaged Party	0.091 (0.164)		0.110 (0.151)	
Identified Correct Party After Passage		0.305 (0.198)		0.127 (0.184)
Identified Incorrect Party After Passage		-0.043 (0.191)		0.137 (0.178)
Constant	3.983*** (0.127)	3.983*** (0.126)	2.554*** (0.117)	2.554*** (0.117)
Observations	215	212	215	212
R ²	0.001	0.016	0.002	0.004
Adjusted R ²	-0.003	0.006	-0.002	-0.006
Residual Std. Error	1.182 (df = 213)	1.172 (df = 209)	1.088 (df = 213)	1.091 (df = 209)
F Statistic	0.310 (df = 1; 213)	1.654 (df = 2; 209)	0.530 (df = 1; 213)	0.379 (df = 2; 209)

Note: * p<0.1; ** p<0.05; *** p<0.01

The results of my survey do not provide evidence to support a relationship between being told which party was disadvantaged and both forms of political participation. This suggests that

learning about the practical effects of gerrymandering on a specific party does not influence willingness to participate beyond learning that they live in a gerrymandered district. Given that these findings do not suggest a relationship between being told which party is disadvantaged in one's gerrymandered district on participation broadly, I turn to identify whether this effect may differ based on the partisanship of the respondent.

Hypotheses 1e and 2e: Belonging to a Disadvantaged Party and Participation

Hypotheses 1e and 2e measure whether being told what party is disadvantaged in a gerrymandered district and belonging to that disadvantaged party moderates the relationship between priming gerrymandering and participation levels. Respondents belong to the disadvantaged party if the state-wide partisan gerrymander favors Republicans (Democrats) and the respondent identifies as a Democrat (Republican), including leaners as partisans. I hypothesize that conventional participation will be lower and unconventional participation will be higher among those belonging to the disadvantaged party. The results of these regressions are shown in Table 6.6.

Overall, these regressions provide no evidence that being primed to think about which party is disadvantaged and belonging to that party results in altered participation. Accordingly, these models do not support hypotheses 1e and 2e. While these findings do not support my hypotheses, the second model provides a positive coefficient for identifying the correct party after passage. This suggests that when individuals who are not affiliated with the disadvantaged party but are told which party was disadvantaged, they are more willing to conventionally participate. This could mean that voters do not necessarily lose faith in the electoral system when they learn they are gerrymandered, but when they learn gerrymandering positively affects them, they are more likely to engage.

Table 6.6: Hypotheses 1e and 2e

	<i>Dependent variable:</i>			
	Conventional		Unconventional	
	(1)	(2)	(3)	(4)
Belongs to Disadv. Party In Gerrymandered District	0.657** (0.267)	0.657** (0.267)	0.099 (0.248)	0.099 (0.249)
Told Advantaged Party	0.301 (0.198)		0.018 (0.184)	
Disadvantaged Party · Told Advantaged Party	-0.563 (0.347)		0.337 (0.322)	
Identified Correct Party After Passage		0.520** (0.246)		-0.033 (0.230)
Identified Incorrect Party After Passage		0.133 (0.227)		0.057 (0.212)
Disadvantaged Party · Correctly Answered		-0.666 (0.409)		0.394 (0.383)
Disadvantaged Party · Incorrectly Answered		-0.535 (0.414)		0.290 (0.387)
Constant	3.771*** (0.152)	3.771*** (0.151)	2.522*** (0.141)	2.522*** (0.141)
Observations	212	212	212	212
R ²	0.032	0.044	0.026	0.026
Adjusted R ²	0.018	0.021	0.012	0.003
Residual Std. Error	1.165 (df = 208)	1.163 (df = 206)	1.082 (df = 208)	1.087 (df = 206)
F Statistic	2.261* (df = 3; 208)	1.915* (df = 5; 206)	1.822 (df = 3; 208)	1.112 (df = 5; 206)

Note: *p<0.1; **p<0.05; ***p<0.01

Hypotheses 1f and 2f: Effect of Passage Informing About No Gerrymandering

Hypotheses H1f and H2f are a replication of hypotheses H1c and H2c for respondents in non-gerrymandered districts. They utilize nearly identical independent and dependent variables as the original hypotheses, but in this case, respondents respond correctly in the attention check by stating they live in a non-gerrymandered district. The results of this regression are shown in Table 6.7.

Regressions 1 and 3 in Table 6.7 show how simply regressing participation on whether respondents received a passage yielded insignificant results. However, the second regression suggests that correctly identifying that one does not live in a gerrymandered district increases willingness to participate conventionally. This evidence supports hypothesis 1f. Similarly, there

is no relationship between respondents correctly identifying that they live in a gerrymandered district and unconventional forms of participation. This evidence supports hypothesis 2f.

Accordingly, while being primed to think about how one is gerrymandered increases unconventional participation, being primed to think about how one lives in a non-gerrymandered district increases conventional participation.

Table 6.7: Hypotheses 1f and 2f

	<i>Dependent variable:</i>			
	Conventional		Unconventional	
	(1)	(2)	(3)	(4)
Received a Passage	0.047 (0.094)		0.011 (0.090)	
Correctly Answered After Passage		0.213** (0.106)		0.036 (0.102)
Incorrectly Answered After Passage		-0.147 (0.110)		-0.019 (0.106)
Constant	4.064*** (0.077)	4.069*** (0.076)	2.612*** (0.073)	2.612*** (0.073)
Observations	655	649	655	649
R ²	0.0004	0.017	0.00002	0.0005
Adjusted R ²	-0.001	0.014	-0.002	-0.003
Residual Std. Error	1.133 (df = 653)	1.126 (df = 646)	1.080 (df = 653)	1.083 (df = 646)
F Statistic	0.248 (df = 1; 653)	5.610*** (df = 2; 646)	0.016 (df = 1; 653)	0.147 (df = 2; 646)

Note: * p<0.1; ** p<0.05; *** p<0.01

Results of Hypothesis Tests

After conducting my survey experiment, there is some evidence supporting and other evidence refuting my theoretical model. While learning about one's own gerrymandered district increased unconventional participation, it did not decrease conventional participation. Learning about which party was disadvantaged in gerrymandered districts did not alter participation among those who were disadvantaged. However, learning that one did not belong to the disadvantaged party led to higher levels of future conventional participation than those who

belong to the disadvantaged party. Finally, learning that you do not live in a gerrymandered district increases levels of willingness to engage in conventional participation, but it does not affect unconventional participation.

Limitations

While my survey experiment evaluated the relationship between gerrymandering and political participation, its interpretation has several methodological limitations. First, although my sample included 1,021 respondents, only one-third lived in a gerrymandered district. This may have reduced the statistical power of my analysis and contributed to null results that would have reached significance with a larger sample. Second, as shown by the manipulation and attention check questions, many respondents failed to recall the message of their treatment. This likely weakened the effectiveness of the priming passage and increased the likelihood of null findings. Third, the conclusions drawn from this experiment apply to a limited set of circumstances. As established in the secondary data analysis, there is no observed relationship between living in a gerrymandered district alone and political participation. Since this experiment involved informing respondents about how gerrymandering affected them and measuring their future willingness to participate, it cannot provide additional insights into how merely residing in a gerrymandered district influences turnout. Furthermore, it cannot assess whether individuals take concrete actions in response to reflecting on the electoral consequences of gerrymandering; it can only assess their intentions to do so. Nonetheless, the results of this survey experiment provide important first steps in understanding the relationship between awareness of gerrymandering and political behavior.

Chapter 7

Discussion

Given the findings of my hypotheses, there is some evidence that gerrymandering is connected to how Americans participate in politics. When Americans do not know whether their district is gerrymandered or not, it does not affect their political behavior. As shown by the analysis of CES data, there is no statistical difference between participation in gerrymandered and non-gerrymandered districts among voters. Additionally, among those living in a gerrymandered district, belonging to the disadvantaged party can slightly decrease conventional political participation. Given these results, it first appears that gerrymandering and participation are not related. However, the CES fails to account for whether respondents know and consider the fact that they live in a gerrymandered district. My survey experiment sought to understand how *thinking about* living in a gerrymandered district influences prospective participation.

Broadly, I found evidence suggesting that thinking about partisan gerrymandering in one's district does not affect conventional forms of participation. People are not willing to vote more or less often due to learning that they are gerrymandered, or which party is disadvantaged in their district. Additionally, belonging to the disadvantaged party is not related to different participation levels. While reading about living in a gerrymandered district does not affect voting behavior, evidence suggests that it does influence unconventional forms of participation. Particularly, those who read about gerrymandered districts and correctly identified themselves as gerrymandered exhibited a higher willingness to unconventionally participate in the future. While reading about partisan disadvantages in one's district did not make individuals more willing to unconventionally participate, respondents who did not belong to the disadvantaged

party had higher future conventional participation levels when they were told their partisan identity was disadvantaged. Given the findings of this survey experiment, there is evidence that when individuals live in a gerrymandered district and are told that they are gerrymandered, they adjust their future willingness to engage in politics.

Finally, I used the survey experiment to determine whether reading that you do not live in a gerrymandered district increases conventional participation and does not affect unconventional participation. My survey analysis confirmed both hypotheses as respondents who correctly identified that they were not gerrymandered experienced a higher willingness to vote in the future but no change in willingness to unconventionally participate.

Table 7.1: Summary of Results from Hypothesis Tests		
	Hypothesis 1: Conventional Participation	Hypothesis 2: Unconventional Participation
Hypothesis a: Effect of living in a district that became newly gerrymandered for the 2022 midterms.	No evidence	No evidence
Hypothesis b: Relationship between belonging to disadvantaged party and participation levels once gerrymandered.	Limited Evidence (negative, marginal effect)	No evidence
Hypothesis c: Effect of receiving treatment sharing that one lives in a gerrymandered district.	No evidence	Supported (positive effect)
Hypothesis d: Effect of receiving treatment sharing which party is disadvantaged in one's gerrymandered district.	No evidence	No evidence
Hypothesis e: Effect of receiving treatment sharing which party is disadvantaged in one's gerrymandered district and belonging to that disadvantaged party	No evidence	No evidence
Hypothesis f: Effect of receiving treatment sharing that one does not live in a gerrymandered district.	Supported (positive effect)	Supported (no effect)

After conducting my secondary data analysis and survey experiment, I found mixed evidence about whether partisan gerrymandering can affect political participation. The results of each hypothesis that I tested are displayed in Table 7.1. As shown in the table, Americans did not automatically change their participation after being redistricted. In my analysis, participation only changed when respondents were explicitly told, and remembered, whether they live in a gerrymandered district or not. Ultimately, I found that while learning that your district is gerrymandered increased unconventional forms of participation, learning that your district is not increased conventional forms of participation.

Chapter 8

Conclusion

In response to these findings, I return to my research question: “What is the effect of partisan gerrymandering on conventional and unconventional forms of participation?” This thesis’ secondary data analysis does not establish a direct link between being gerrymandered and participation. However, my experiment suggests that learning about living in a partisan gerrymander increases unconventional participation levels, particularly when the respondent belongs to a party disadvantaged by gerrymandering.

These results help to clarify questions that have been left open by literature. While there is some evidence that gerrymandering decreases voting, there has been no consensus in the field about its true effect. My findings align with Moskowitz and Schneer (2019) who do not establish a direct relationship between gerrymandering and turnout and fail to confirm Jones, Silveus, and Urban’s (2023) conclusion that living in a gerrymandered district decreases conventional participation. However, this thesis provides a new interpretation of participation among those who do not live in gerrymandered districts. Particularly, being told that you live in a non-gerrymandered district and remembering that fact leads to an increase in their willingness to vote. This suggests that while learning that the impact of your vote is diminished through gerrymandering does not make you less likely to vote, learning that your vote is less likely to be wasted makes you more likely to vote. Furthermore, being primed to think about living in a gerrymandered district increases your willingness to unconventionally participate. This suggests that when individuals learn that their vote is a less effective means of exerting their political power, they seek new, unconventional forms of participation to have a say in political issues.

This thesis shows that while extant research has almost exclusively considered the relationship between partisan gerrymandering and voting, it may have a stronger influence on other forms of political behavior such as protesting, signing petitions, donating, contacting elected officials, and posting about politics. While respondents in a gerrymandered district may not be mobilized (or demobilized) at the polls because of learning that they are gerrymandered, those in gerrymandered districts are more willing to engage in politics elsewhere when their voting power is diminished.

These findings also highlight the importance of a public that is fully aware of the impact of partisan gerrymandering. The contrasting findings between my secondary data analysis and survey experiment underscore how the American public is often unaware of how gerrymandering affects their representation. This knowledge gap is important because even though partisan gerrymandering does not decrease conventional participation, Americans are more empowered to vote when they know that they live in a fairly drawn district. Accordingly, by reducing partisan gerrymandering across the country, members of the public may become more actively engaged in the core of our democracy: elections. Similarly, when individuals were reminded about the impact of gerrymandering on their district, they became emboldened to seek other forms of participation, such as protesting and contacting elected officials.

At the same time, these findings also underscore the importance of finding ways to restrict partisan gerrymandering. The fact that individuals who are reminded they are not gerrymandered were more willing to conventionally participate suggests that Americans are incentivized to vote when they learn that their congressional elections are fair. By imposing guidelines that curb gerrymandering, it is possible that future voter turnout could increase as Americans see more value in voting.

Finally, these findings demonstrate how communities that have been disadvantaged by partisan gerrymandering can remain politically engaged and continue to fight for their policy interests. The results of the survey experiment show how individuals who are reminded about gerrymandering in their district are more willing to unconventionally participate. As politicians and organizers seek to keep voters engaged in gerrymandered districts, reminding them about how the power of their vote is weakened may effectively increase alternative forms of engagement. While conventional political power is diminished by partisan gerrymandering, this fact can serve as a tool to galvanize democratic engagement in a way that cannot be advanced at the ballot box.

Appendix 1

CES Analysis Replication Data and Key Participation Variables

The raw CES data and other relevant data sets from my secondary data analysis can be found at: <https://drive.google.com/drive/folders/1JAIuVNE9n2NCcfw5k5H6ZwxCqKtSpW78?usp=sharing>. This folder also contains replication code from the analysis contained within the analysis of CES data.

Table A1.1: CES Conventional Participation Variables	
CES Variable Name	CES Variable Description
vv_regstatus	Validated registration status
vv_turnout_pvm	Validated turnout Primary Election
vv_turnout_gvm	Validated turnout General Election

Table A1.2: CES Unconventional Participation Variables	
CES Variable Name	Description
CC18_417a_1/ CC22_430a_1	Attend local political meetings
CC18_417a_4/ CC22_430a_4	Attend a political protest, march, or demonstration
CC18_417a_5/ CC22_430a_5	Contact a public official
CC18_417a_6/ CC22_430a_6	Donate money to a candidate, campaign, or political organization
CC18_300d_1/ CC22_300d_1	Recent social media use - Posted a story, photo, video, or link

	about politics
CC18_300d_2/ CC22_300d_2	Recent social media use - Posted a comment about politics
CC18_300d_3/ CC22_300d_3	Recent social media use - Read a story or watched a video about politics
CC18_300d_5/ CC22_300d_5	Recent social media use- Forwarded a story, photo, video, or link about politics to friends

Appendix 2

Survey Experiment Text

Start of Block: Consent

consent

Title of Research Study: A survey of political views and factors that shape political participation.

Principal Investigator: Laurel Harbridge-Yong

Supported By: This research is supported by the Political Science Department and Office of Undergraduate Research at Northwestern University.

Northwestern IRB study number: STU00222926

Key Information about this research study: The following is a short summary of this study to help you decide whether to be a part of this study. The purpose of this study is to learn more about people's views and how they participate in politics through voting and other forms of engagement. You will be asked to answer questions about your background, read short sections of text about political issues, and share your willingness to participate in politics. We expect that you will be in this research study for about 10-12 minutes. There are no known risks associated with this study beyond those associated with everyday life and usage of the internet.

Although this study will not benefit you personally, we hope our results will add to knowledge about how people participate in politics.

Why am I being asked to take part in this research study? We are asking you to take part in this research study because we would like to know your views on politics and your political participation. Eligible participants are U.S. residents ages 18 and older.

How many people will be in this study? We expect about 1,000 people will be in this research study.

What should I know about participating in a research study? Whether or not you take part is up to you. You can choose not to take part. You can agree to take part and later change your mind. Your decision will not be held against you. You can ask all the questions you want before you decide. You do not have to answer any question you do not want to answer.

What happens if I say, "Yes, I want to be in this research"? You will be asked to complete an online survey that includes reading some short text passages and answering some questions about yourself and your views on politics. The survey is expected to take 10-12 minutes to complete.

Will being in this study help me in any way? We cannot promise any benefits to you or others from your taking part in this research. However, possible broader benefits include a better understanding of how people make decisions about whether and how to participate in politics.

Is there any way being in this study could be bad for me? There are no foreseeable risks associated with this research beyond those associated with everyday life and usage of the internet.

What happens if I do not want to be in this research, or I change my mind later?

Participation in research is voluntary. You can decide to participate or not to participate. If you do not want to be in this study or withdraw from the study at any point, your decision will not affect your relationship with Northwestern University/Northwestern Memorial Healthcare. You

can leave the research at any time and it will not be held against you. If you decide to withdraw from this study, just close the survey and we will delete your responses.

How will the researchers protect my information? No identifying information about you will be collected in this study. You will only be identified by a unique subject number.

Who will have access to the information collected during this research study? Efforts will be made to limit the use and disclosure of your personal information, including research study records, to people who have a need to review this information. We cannot promise complete secrecy. There are reasons why information about you may be used or seen by other people beyond the research team during or after this study.

Examples include: University officials Government officials Study funders
Auditors Institutional Review Board These individuals/organizations may need access to the study information to make sure the study is done in a safe and appropriate manner.

How might the information collected in this study be shared in the future? We will keep the information we collect about you during this research study for study recordkeeping. This information includes only deidentified data which contains no unique identifying information about you. De-identified data from this study may be shared with the research community, with journals in which study results are published, and with databases and data repositories used for research.

Will I be paid or given anything for taking part in this study? If you agree to take part in this research study and successfully complete the survey according to Lucid Theorem and its partner organization standards, we will provide you with incentive compensation through Lucid Theorem or its partner organizations. This compensation will be approximately \$0.50, but may vary based on your survey organization policy. It may be in the form of cash, gift cards, reward points, or other items, as outlined in your survey panelist agreement. Please note that there is no compensation for partial completion of the survey.

Who can I talk to? If you have questions, concerns, or complaints, you can contact the Principal Investigator Laurel Harbridge-Yong (l-harbridge@northwestern.edu). This research has been reviewed and approved by an Institutional Review Board (“IRB”) – an IRB is a committee that protects the rights of people who participate in research studies. You may contact the IRB by phone at (312) 503-9338 or by email at irb@northwestern.edu if: Your questions, concerns, or complaints are not being answered by the research team. You cannot reach the research team. You want to talk to someone besides the research team. You have questions about your rights as a research participant. You want to get information or provide input about this research.

Consent If you want a copy of this consent for your records, you can print it from the screen. If you cannot print the consent and would like a copy for your records, contact the Principal Investigator with the contact information above. If you are 18 years or older and wish to participate, please click the “I agree” button and you will be taken to the survey. If you do not wish to participate in this study, please select “I disagree” or select X in the corner of your browser.

- I agree (1)
- I disagree (2)

End of Block: Consent

Start of Block: Demographic Information

enteredzip Please enter your 5-digit ZIP code:

agesr What is your age?

- Under 18 (1)
- 18 - 24 (2)
- 25 - 34 (3)
- 35 - 44 (4)
- 45 - 54 (5)
- 55 - 64 (6)
- 65 - 74 (7)
- 75 - 84 (8)
- 85 or older (9)

gendersr What is your gender identity?

- Male (1)
 - Female (2)
 - Non-binary / third gender (3)
 - Prefer not to say (4)
 - Prefer to self-describe: (5)
-

racestr Which of the following best describes you? Select all that apply.

- White (1)
- Black or African American (2)
- American Indian or Alaska Native (3)
- Asian (4)
- Native Hawaiian or Pacific Islander (5)
- Other (6)
- Prefer not to say (7)

hispanicsr Do you identify as Hispanic/Latino?

- Yes (1)
- No (2)

incomesr What was your total household income before taxes during the past 12 months?

- Less than \$25,000 (1)
 - \$25,000-\$49,999 (2)
 - \$50,000-\$74,999 (3)
 - \$75,000-\$99,999 (4)
 - \$100,000-\$149,999 (5)
 - \$150,000 or more (6)
 - Prefer not to say (7)
-

educationsr What is the highest level of education you have attained?

- Did not graduate from high school (1)
- High school diploma or GED (2)
- Some college, but no degree (yet) (3)
- 2-year college degree (4)
- 4-year college degree (5)
- Postgraduate degree (MA, MBA, MD, JD, PhD, etc.) (6)
- Prefer not to say (7)

End of Block: Demographic Information

Start of Block: Voting Demographics

uscitizen Are you a US citizen?

- Yes (1)
- No (2)

enteredreg Are you a registered voter?

- Yes (1)
- No (2)
- Unsure (3)

rightzip Is $\${enteredzip/ChoiceTextEntryValue}$ the zipcode where you are registered to vote?

- Yes (1)
- No (2)



newzip What zip code are you registered to vote in?

ideology How would you describe your political ideology?

- Very Liberal (1)
 - Liberal (2)
 - Somewhat liberal (3)
 - Middle of the road (4)
 - Somewhat conservative (5)
 - Conservative (6)
 - Very conservative (7)
-

partisanship Generally speaking, do you think of yourself as a:

- Strong Democrat (1)
- Democrat (2)
- Lean Democrat (3)
- Independent (4)
- Lean Republican (5)
- Republican (6)
- Strong Republican (7)

End of Block: Voting Demographics

Start of Block: passagey

passagey On the next page, you will be presented with a description of a political topic. Please read this excerpt carefully.

- I understand (1)

End of Block: passagey

Start of Block: G Prime

Q19 Every 10 years, states are responsible for redrawing their congressional districts to accommodate population changes through a process called redistricting. Each state sets its own rules for redistricting, and the people responsible for redistricting vary by state. In some states, politicians are responsible for redrawing congressional districts. In others, the courts or independent commissions redraw districts. While some states seek to be impartial and fairly

represent the state's demographic makeup, others draw maps that give specific groups a systemic advantage. **Our records show that you live in a congressional district that reflects "partisan gerrymandering."** In a partisan gerrymandered district, political lines are drawn to favor one party, often diminishing minority party representation. Partisan gerrymandering manipulates district boundaries to increase the voting power of the majority party while decreasing the influence of the opposition party. This means that voters in gerrymandered districts may find themselves lumped with communities different from their own to waste their votes. Alternatively, voters from a minority party may be packed together in a gerrymandered district that overwhelmingly favors that party. Districts such as these may be created to limit the number of congressional seats the minority party can win statewide. Both of these methods are strategies to sway election outcomes in favor of the majority party. As a result, partisan gerrymandering makes voter's choices less impactful in elections.

Q62 Timing

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Page Submit (3)

Click Count (4)

End of Block: G Prime

Start of Block: G P Prime

Q20 Every 10 years, states are responsible for redrawing their congressional districts to accommodate population changes through a process called redistricting. Each state sets its own rules for redistricting, and the people responsible for redistricting vary by state. In some states, politicians are responsible for redrawing congressional districts. In others, the courts or independent commissions redraw districts. While some states seek to be impartial and fairly represent the state's demographic makeup, others draw maps that give specific groups a systemic advantage. **Our records show that you live in a congressional district that reflects "partisan gerrymandering."** In a partisan gerrymandered district, political lines are drawn to favor one party, often diminishing minority party representation. Partisan gerrymandering manipulates district boundaries to increase the voting power of the majority party while decreasing the influence of the opposition party. This means that voters in gerrymandered districts may find themselves lumped with communities different from their own to waste their votes. Alternatively, voters from a minority party may be packed together in a gerrymandered district that overwhelmingly favors that party. Districts such as these may be created to limit the number of congressional seats the minority party can win statewide. Both of these methods are strategies to sway election outcomes in favor of the majority party. As a result, partisan gerrymandering makes voter's choices less impactful in elections. **In your congressional district, the `#{e://Field/advantagedparty}` Party has an advantage as a result of the redistricting process. In the 2024 elections, partisan gerrymandering diminished the power of the `#{e://Field/disadvantagedparty}` Party members within your district.**

Q63 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: G P Prime

Start of Block: passagen

passagen On the next page, you will be presented with a description of a political topic. Please read this excerpt carefully.

I understand (1)

End of Block: passagen

Start of Block: NG Prime

not gerrymander prim Every 10 years, states are responsible for redrawing their congressional districts to accommodate population changes through a process called redistricting. Each state sets its own rules for redistricting, and the people responsible for redistricting vary by state. In some states, politicians are responsible for redrawing congressional districts. In others, the courts or independent commissions redraw districts. While some states seek to be impartial and fairly represent the state's demographic makeup, others draw maps that give specific groups a systemic advantage. **Our records show that you do not live in a congressional district that reflects "partisan gerrymandering."** In a partisan gerrymandered district, political lines are drawn to favor one party, often diminishing minority party representation. Partisan gerrymandering manipulates district boundaries to increase the voting power of the majority party while decreasing the influence of the opposition party. This means that voters in gerrymandered districts may find themselves lumped with communities different from their own to waste their votes. Alternatively, voters from a minority party may be packed together in a gerrymandered district that overwhelmingly favors that party. Districts such as these may be created to limit the number of congressional seats the minority party can win statewide. Both of these methods are strategies to sway election outcomes in favor of the majority party. As a result, partisan gerrymandering makes voter's choices less impactful in elections.

Q64 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: NG Prime

Start of Block: NG P Prime

Q22 Every 10 years, states are responsible for redrawing their congressional districts to accommodate population changes through a process called redistricting. Each state sets its own rules for redistricting, and the people responsible for redistricting vary by state. In some states, politicians are responsible for redrawing congressional districts. In others, the courts or independent commissions redraw districts. While some states seek to be impartial and fairly represent the state's demographic makeup, others draw maps that give specific groups a systemic advantage. **Our records show that you do not live in a congressional district that reflects "partisan gerrymandering."** In a partisan gerrymandered district, political lines are drawn to favor one party, often diminishing minority party representation. Partisan gerrymandering manipulates district boundaries to increase the voting power of the majority party while decreasing the influence of the opposition party. This means that voters in gerrymandered districts may find themselves lumped with communities different from their own to waste their votes. Alternatively, voters from a minority party may be packed together in a gerrymandered district that overwhelmingly favors that party. Districts such as these may be created to limit the number of congressional seats the minority party can win statewide. Both of these methods are strategies to sway election outcomes in favor of the majority party. As a result, partisan gerrymandering makes voter's choices less impactful in elections. **In your congressional district, neither the Republican Party nor the Democratic Party has an advantage as a result of the redistricting process. For the 2024 congressional elections, your state utilized a redistricting process that did not result in partisan gerrymandering in your district. Accordingly, no political party is systematically disadvantaged in your congressional elections.**

Q65 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: NG P Prime

Start of Block: Emotions



emotions How do you feel about how politics may shape the way your congressional district is drawn?

- Happy (1)
- Sad (2)
- Worried (3)
- Calm (4)
- Excited (5)
- Frustrated (6)
- Relieved (8)
- Mad (7)
- Hopeful (9)
- Motivated (10)

End of Block: Emotions

Start of Block: Future Participation



prospective We'd like to know about how you think about engaging in politics. How likely are you to engage in the following actions?

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
Vote in the primaries for the 2026 midterm elections (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vote in the general for the 2026 midterm elections (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend a protest in the next year (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post a political message online in the next year (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contact an elected official in the next year (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sign a petition in the next year (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Donate to a political candidate or cause in the next year (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Future Participation

Start of Block: Prior Participation

general22 **The following questions will ask about your behavior in the past two years.** Did you vote in the 2022 general election?

- Yes (3)
- No (5)
- Not sure (4)

primary24 Did you vote in the 2024 primary election?

- Yes (3)
- No (5)
- Not sure (4)

general24 Did you vote in the 2024 general election?

- Yes (3)
- No (5)
- Not sure (4)

protestpast Have you attended a protest in the *past year*?

- Yes (3)
- No (5)
- Not sure (4)

numberprotest How many protests have you attended in the *past year*?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- More than 5 (6)

messagepast Have you posted a political message online in the *past year*?

- Yes (3)
- No (5)
- Not sure (4)

numbermessage How many times have you posted a political message online in the *past month*?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- More than 5 (6)

contactpast Have you contacted any elected officials in the *past year*?

- Yes (3)
- No (5)
- Not sure (4)

numbercontact How many times have you contacted an elected official in the *past year*?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- More than 5 (6)

petitionpast Have you signed a petition in the *past year*?

- Yes (3)
- No (5)
- Not sure (4)

numberpetition How many times have you signed a petition in the *past year*?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- More than 5 (6)

End of Block: Prior Participation
Start of Block: Political Knowledge

Q38 The next questions ask about what you know about American politics. These are questions that some people know but many people do not know.

selfgerrymander Has your congressional district been affected by the process known as partisan gerrymandering?

- Yes (1)
- No (2)
- I don't know (3)

selfpartyadv Which political party (if any) gets a structural advantage from how your congressional district is drawn?

- The Republican Party (1)
- The Democratic Party (2)
- Neither party (3)
- I don't know (4)

speakerans Who is currently the Speaker of the U.S. House of Representatives?

- Kevin McCarthy (1)
- Mike Johnson (2)
- Hakeem Jeffries (3)
- Nancy Pelosi (4)
- Don't know (5)

majorityans Which political party currently holds the majority in the U.S. Senate?

- Democratic Party (1)
- Republican Party (2)
- Neither party holds a majority (3)
- Don't know (4)

termlengthans How long is the term for a U.S. Senator?

- 2 years (1)
- 4 years (2)
- 6 years (3)
- 8 years (4)
- Don't know (5)

chiefans Who is the Chief Justice of the US Supreme Court?

- John Roberts (1)
- Clarence Thomas (2)
- Sonia Sotomayor (3)
- Samuel Alito (4)
- Don't know (5)

Page Break

congressperson What is the name of your congressperson in the House of Representatives?

- Type name here: (1) _____
- Don't know (2)

End of Block: Political Knowledge

Appendix 3

Survey Experiment Replication Data and Summary Statistics

The raw data collected from the survey experiment can be found at: <https://drive.google.com/drive/folders/1-rLctsvp27H3WeeNw4fTKd58bUeFmvxQ?usp=sharing>. This folder also contains replication code from the analysis contained within this thesis.

Table A3.1 Survey Demographics	
Age	
18-24	5.47%
25-34	18.02%
35-44	16.76%
45-54	16.19%
55-64	19.16%
65-74	15.62%
75-84	8.10%
85+	0.68%
Race	
White Alone	74.80%
Black or African American Alone	14.71%
Asian	2.85%
Native American or Pacific Islander	1.25%
Other	2.62%
Two or More	3.32%
Prefer not to say	0.45%

Gender	
Female	54.96%
Male	44.70%
Non-binary/third gender/ self-describe	0.23%
Education	
Less than high school diploma	2.73%
High school diploma	25.20%
2-year college degree	13.45%
Some college, but no degree (yet)	21.78%
4-year college degree	26.33%
Postgraduate degree	10.38%
Prefer not to say	0.11%

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