

The Obama Effect?

Race, First-time Voting, and Future Participation*

Jacob R. Brown[†]

March 6, 2020

Abstract

Did the 2008 United States election produce stronger future mobilization for Blacks than non-Blacks? First-time voting influences long-term political behavior, but do minority voters see the most powerful effects when the formative election is tied to their group's political empowerment? I test this hypothesis in the context of the election of the first Black president in United States history, using voting eligibility discontinuities to identify the effect of voting in 2008 on future voting for Blacks, Hispanics, and Whites. Voting in 2008 caused a greater increase in the likelihood of voting in 2010 for Blacks than for other new voters, but there is no evidence of a sustained mobilizing advantage in subsequent elections. Furthermore, 2008 was not a unique formative voting experience for new Black voters, but rather produced similar effects on future voting as other presidential elections. These results signal that group political empowerment does not drive habitual voting.

*Thank you to Ryan Enos for sharing the voterfile data. This project has benefited from conversations with Shannon Parker, Hanno Hilbig, Alex Mierke-Zatwarnicki, Michael Zoorob, Xiang Zhou, Matthew Blackwell, Shiro Kuriwaki, Shom Mazumder, and helpful commenters at the Midwestern Political Science Association 2018 Annual Meeting. All mistakes are my own.

[†]Department of Government, Harvard University, jrbrown@g.harvard.edu

1 Introduction

Fluctuations in racial group turnout are increasingly decisive in United States elections, bringing renewed importance to the study of why some groups vote more than others, and how group identity structures political behavior. Racial identity is one of the most influential determinants of political behavior in the United States, shaping political attitudes, partisan identification, public opinion, and voting (Dawson, 1995; Hutchings and Valentino, 2004). To explain patterns in minority group voting, scholars put forth numerous theories, including the effect of political empowerment (Browning, Marshall and Tabb, 1984; Bobo and Gilliam, 1990), considerations of electoral influence (Gay, 2001; Fraga, 2018) and targeted mobilization (Leighley, 2001; Bedolla and Michelson, 2012).

These theories primarily focus on explaining why racial groups vote in a given moment: They are mobilized to vote in response to the candidacy of in-group members (Gilliam, 1996; Barreto, 2007), they are more likely to turn out as their share of the electorate (and thus influence) increases (Spence and McClerking, 2010; Fraga, 2016b), or they are specifically mobilized by group-targeted Get Out the Vote (GOTV) campaigns (Valenzuela and Michelson, 2016; Green, 2004). These theories generally do not address, however, how racial identity structures patterns of participation over the life-cycle, particularly whether racial identity influences the development of persistent attachments to politics that produce regular voters. Some studies of voting behavior argue that internal consistency in voting behavior is due to voting itself being habit forming (Green and Shachar, 2000; Plutzer, 2002). Habitual voting develops through psychological mechanisms – voters develop an attachment to political participation that augments the utility of future engagement – and environmental mechanisms – voters are persistently mobilized by political campaigns or government institutions (Gerber, Green and Shachar, 2003; Meredith, 2009; Mullainathan and Washington, 2009; Dinas, 2012, 2014a; Coppock and Green, 2016). But studies of voting habits have not yet considered how

these effects vary across voter groups, or what kinds of voting experiences spur the greatest future mobilization.

Here, I build on past understandings of group political empowerment and habitual voting to test whether voting produces stronger future mobilizing effects – whether voters are more likely to vote in later elections as a result of voting in a previous one – when first-time voting is linked to group political empowerment. I theorize that racial identity should interact with electoral context to shape the effect of voting on future voting. Specifically, formative voting experiences in which a candidate from a minority group is elected and where the group plays a pivotal role in the electorate should produce the strongest effects on voting in later elections for that group. This effect should be augmented if the election sets a historical precedent for minority group political empowerment. Research in the comparative literature provides some evidence for this model of empowered habitual voting (see [de Kadt \(2017\)](#)). Does this pattern hold in the United States?

The election of the first Black president in United States history offers a unique opportunity to test this hypothesis. The election of President Barack Obama was a landmark election, both as a symbol of racial progress, and because the election featured unprecedented levels of turnout from young minority voters. By many accounts, this first-time voting experience carried special significance. For example, racial justice activist Samuel [Sinyangwe \(2019\)](#) reflected: “First election I voted in was ’08. Seeing Obama win helped establish a confidence in political engagement. When I hear younger folks say they’re done voting after their candidate lost in ’16/’18 I’m reminded how voter suppression impacting one election shapes long-term engagement.”

I measure whether Blacks who voted for the first time in the 2008 election experienced a greater increase in their likelihood of voting in future elections compared to voters of other racial groups. Comparing voters born just before and just after the voting eligibility cutoff, I identify the causal effect of voting in 2008 on voting in future elections. I estimate

these effects for Blacks, Whites, and Hispanics, comparing voters in each racial group to just ineligible voters of the same race. Next, I compare the future mobilizing effects of the 2008 election to other presidential elections, to test whether 2008 was a uniquely mobilizing election for Blacks.

This study addresses a question of general theoretical importance: Whether formative political experiences produce stronger mobilizing effects when they are tied to identity and group empowerment, and one of contemporary relevance: Did voting for President Obama durably increase the political participation of Black voters? Minority turnout is pivotal to the outcomes of American elections, as Democratic Party success often hinges on Black and Hispanic voters (Philpot, Shaw and McGowen, 2009; Jackman and Vavreck, 2010; Abrajano and Hajnal, 2015). In the 2008 election, unprecedented numbers of young and minority voters – especially young Black voters – were mobilized to vote (McDonald, 2017). If voting in the election of the first Black president led to the formation of stronger voting habits for young Black voters, then the 2008 election altered the shape of future electorates¹.

The data, however, show that this is not the case. While the results demonstrate that voting in the 2008 election caused a larger increase in the likelihood of voting in the 2010 midterm elections for Blacks compared to other racial groups, this advantage disappears in subsequent elections. By 2012, the effect is largest for Hispanic voters. By 2016, the effect for Blacks lags behind the effect even for White voters. What’s more, the 2008 election appears to have produced similarly sized mobilization effects for Blacks as the 2000, 2004, and 2012 elections. Thus, voting for the first time in the election of President Obama did not produce larger increases to future voting for Blacks compared to other racial groups nor

¹Election outcomes in 2010, 2014, and 2016 indicate that there was a breakdown of the Obama coalition in later elections. Many factors could have contributed to this breakdown, and many of the factors that caused voters from 2008 to not vote in later elections exert common effects across voters. This study holds these factors constant to isolate the effect of voting in 2008 on future voting. While turnout from 2008 minority voters overall decreased in later elections, it is entirely possible that there is still a net positive effect of casting a ballot in 2008 on voting later, and that this isolated effect is greatest for Blacks.

did it drive greater future mobilization for new Black voters than other recent presidential elections.

These results represent strong evidence that racial group political empowerment is not a major determinant of habitual voting. The 2008 presidential election is the formative voting experience from which we would most expect to observe greater effects for Blacks, if group empowering political experiences drove voting habits. While formative voting experiences tied to political empowerment may produce larger mobilizing effects for the empowered group in the short-term, persistent mobilizing advantages do not result from such first-time voting experiences. These findings are contrary to evidence from outside the United States showing that formative voting experiences can produce more persistent participation effects when tied to identity and group empowerment (de Kadt, 2017), but consistent with evidence from the United States that the election of Black mayors provides only temporary boosts to Black turnout (Gilliam, 1996; Gilliam and Kaufmann, 1998). Given the centrality of race in American politics, these findings are both surprising and important. The significance of the first Black president to Black Americans should not be understated, but it did not produce unique persistence in political behavior. Black political empowerment at the national scale appears insufficient to durably increase Black political participation.

2 The Empowerment Model of Habitual Voting

In this study I put forth a model of empowerment-driven habitual voting – the extent to which formative voting experiences produce the strongest attachments to politics, and the strongest future effects on participation, when they are tied to group political empowerment. This theory is an extension of Black political empowerment as conceptualized by Bobo and Gilliam (1990), considering it as a mechanism by which voting habits are formed, and testing it on the national electoral scale.

2.1 Habitual Voting and Formative Voting Experiences

An individual who votes in one election is likely to have voted in previous elections, and is likely to vote in future ones (Plutzer, 2002; Denny and Doyle, 2009). What factors drive this consistency in voting? The participation literature offers many explanations, including parental socialization, the reinforcing role of social networks, persistent mobilizing effects of interest groups, political parties and political campaigns, and socio-economic factors such as education, income and social capital (Brady, Verba and Schlozman, 1995; Hersh, 2015; Atkinson and Fowler, 2014; Sears and Valentino, 1997; Aldrich, 1993; Rosenstone and Hansen, 1993; Campbell, 2003). One theoretical strand argues that voting is best theorized in the context of habit formation (Green and Shachar, 2000; Plutzer, 2002; Fowler, 2006; Denny and Doyle, 2009; Dinas, 2012). Research in American politics consistently demonstrates that voting in an election causally increases the likelihood of voting in future elections (Meredith, 2009; Dinas, 2012, 2014a; Coppock and Green, 2016). These effects can persist, dependent on context, for multiple elections cycles (Meredith, 2009; Dinas, 2012; Coppock and Green, 2016). Voting has been further linked to persistence in partisan identification and candidate assessment, as voting for a candidate or party reinforces a voter’s attachment to that candidate or party (Mullainathan and Washington, 2009; Dinas, 2014a).

Early political experiences can strongly influence the formation and persistence of voting behavior, political attitudes, partisan identification, and ideology (Campbell et al., 1960; Butler and Stokes, 1971; Dinas, 2013, 2014b). Partisan identity and political ideology are remarkably consistent over life course (Green, Palmquist and Schickler, 2002), and people are most susceptible to attitudinal change when they are young, before they have developed strong political attachments and accumulated prior political experiences and information (Schuman and Scott, 1989; Sears and Valentino, 1997; Dinas, 2013). First-time voting experiences can be catalyzing events that shapes voters’ attachment to political participation

moving forward (de Kadt, 2017) and provides the context in which they are first added to voter registration lists and campaign databases (Hersh, 2015).

Elections vary in salience, the candidates, relevant issues, relative strength of political parties, scandals, and other characteristics. But even conditional on electoral context, elections mean different things to different groups of people. Sears and Valentino (1997) acknowledge that pre-adult political socialization can be catalyzed by political events, but argue that these events socialize political attitudes and behaviors selectively, within the domains they make salient. Elections that make racial identities salient may structure political attitudes and behaviors differently across racial groups. These differences may be especially pronounced when one group experiences considerable political empowerment – the emergence of the group as a pivotal voting bloc and/or the election of political leaders of that group (Bobo and Gilliam, 1990). For example, de Kadt (2017) analyzes the 1994 South African presidential election, the first in which Black South Africans were allowed to vote, finding persistent participatory effects for Blacks caused by voting in the election². In the American context, Jesse Jackson’s 1984 presidential candidacy was followed by a surge in Black voter registration (Walton, 1985), but this surge did not manifest into heightened voting in later elections (Alt, 1995). In city elections, the election of Blacks mayors is generally followed by increased political participation by Blacks, but with diminishing returns the longer the period of political empowerment (Gilliam, 1996; Gilliam and Kaufmann, 1998; Spence and McClerking, 2010; Owens and Brown, 2014).

2.2 Empowerment and Habit in the 2008 Presidential Election

Political empowerment is “the extent to which a group has achieved significant representation and influence in political decision making” (Bobo and Gilliam, 1990, p.378-379). This theory argues that racial group turnout is a product of political context, and turnout is highest

²There are key contextual differences that separate the 1994 South Africa and 2008 U.S. examples, particularly that the 1994 South African election featured a much broader change in the political status quo.

where groups have the highest levels of political empowerment or political incorporation (Browning, Marshall and Tabb, 1984). In such contexts, minority voters perceive that their vote will have an impact on politics and feel more trusting of the political process, and this heightened feeling of political efficacy will spur greater voting (Bobo and Gilliam, 1990; Gay, 2002). Bobo and Gilliam (1990) explicitly argue that Black political empowerment should cause not just heightened Black political participation, but participation rates that equal or exceed that of Whites. Empowerment has been extended to explain Hispanic (Barreto, Segura and Woods, 2004) and Asian voting behavior (Wong, Lien and Conway, 2005).

Political empowerment has been operationalized by empirical researchers in a variety of ways: the presence of in-group electoral candidates (Barreto, 2007), the actual election and office-holding of these candidates (Bobo and Gilliam, 1990; Gilliam, 1996; Gay, 2001, 2002), and the relative size of the minority group population within the electorate (Browning, Marshall and Tabb, 1984; Spence and McClerking, 2010; Fraga, 2016a). Each of these measurement strategies speaks to different components of political empowerment, and measuring the isolated effects of these mechanisms is difficult. Fraga (2018) highlights that empowerment is difficult to separate from campaign mobilization and notions of group electoral relevance. Work on Black turnout disentangles the effect of Black representatives and Black electorates, demonstrating that it may be the increased sense of one’s vote being meaningful, rather than a descriptive representative, that drives Black turnout in majority-minority districts (Gay, 2001, 2002; Fraga, 2016a,b).

In this study, I operationalize political empowerment as a bundled treatment: A political experience is characterized by group political empowerment if 1) the election has symbolic significance for the group, 2) features the election of an in-group candidate, 3) the group wields significant electoral influence, and 4) campaigns devote special attention to registering and turning out minority voters. The 2008 election was characterized by all of these components of political empowerment. The election resulted in the election of Barack Obama, the

first Black president in United States history. On top of that, the election saw unprecedented Black turnout, with the largest increases among young Black voters (CPS, 2000-2014). Not only were young Black voters voting to elect the first President who shared their racial makeup, they were doing so alongside record numbers of their age demographic and racial group. Thus, voting for the first time in this historic election should be a meaningful and strongly positive formative voting experience for Black voters. Furthermore, the pivotal role of Black voters in the election should incentivize political campaigns to mobilize such voters in future electoral cycles, and the new voters who voted in 2008 should be the first targets of these mobilization efforts. Through these mechanisms, I expect voting for the first time in the 2008 election to produce larger effects for Black voters than for voters of other racial groups. I further expect that voting in 2008 should influence future mobilization more than voting in other recent presidential elections.

The treatment here is not just the experience of the 2008 election, but voting for the first time in the election. To varying degrees, elections are experienced by both voters and non-voters. The symbolic significance of the election of President Obama was inspiring to many people who did not or could not participate in the election. However, if someone is eligible and planning to vote in an upcoming election, they will likely be far more engaged in the election, and more deeply internalize its significance, than someone who is not going to be able to vote in the election. Contributing directly to the election of the empowering candidate can reinforce political efficacy and attachment to politics. These emotions become connected to the act of voting, and future voting can be a way to re-invoke these emotions (de Kadt, 2017). Furthermore, when a formative voting experience is linked to racial group political empowerment, voting in that election should more closely link political identity to racial identity, and future voting will be viewed as function of these identities, as well as a mechanism for realizing future empowerment. Thus, voting is what should increase the likelihood of voting in the future, and the empowering characteristics of voting in 2008

should be most potent for first-time Black voters³

To support the formulation of this hypothesis, in the Appendix I analyze survey data from the Cooperative Congressional Election Study (CCES) from 2009 through 2018, comparing the responses of people who were 18 years old and eligible to vote in the 2008 election to the responses of those who were 17 and just ineligible. Blacks who were eligible to vote in the 2008 election reported, in later years, greater levels of political interest, approval for President Obama, and more positive assessments of the trajectory of the economy under President Obama than Black respondents ineligible to vote in the election. This eligibility cohort gap was generally greater for Black respondents than for White or Hispanic respondents⁴. This evidence supports the argument that the 2008 election represents a more positive formative voting experience for Blacks than non-Blacks, one that could increase political interest and attachment to politics in a manner that could shape future participation. The evidence further supports the contention that participation in the 2008 election, rather than its general experience, is what would likely drive future voting effects, as Blacks who were eligible to vote in 2008 saw increases in their political interest and support for President Obama compared to Blacks who were ineligible to vote. Whether this empowering voting experience led to durable future participation remains an open question, one I test directly in the main analyses.

2.3 Registration and Mobilization

Political empowerment does not just function through psychological mechanisms, it also provides the energy and means to overcome structural and institutional barriers to voting

³Voting habits could work through partisanship, as voting for a winning candidate draws a voter closer to that candidate's party and incentivizes future voting to again realize this partisan preference (Mullainathan and Washington, 2009; Dinas, 2014a). With this in mind, I include analysis of voting in 2008's effect on future partisanship in the results section.

⁴Similar to the main results in the paper, however, I do not find that Blacks survey respondents were more likely to vote in future elections than White or Hispanic respondents, and I further find that the observed increase in political interest and attachment to President Obama did not translate into greater political knowledge or additional forms of political participation such as attending local meetings, putting out a political sign, volunteering for a campaign, or donating to political causes. I include a full write-up of these analyses as well as robustness checks in the Appendix.

(Walton, 1985). In the United States, registration is required to vote, and the registration system can exert strong depressive effects on turnout (Powell, 1986). Throughout American political history minority voting have faced barriers to registration and voting (Walton, 1985). One channel through which political empowerment can durably increase minority voting is by boosting minority registration. The 2008 election brought a wave of young Black and minority voters into the electorate, overcoming a key obstacle to sustained participation and offering the opportunity for persistent mobilization of these new voters moving forward.

Mobilization by political institutions likely influences the persistence of voting across multiple election cycles (Rosenstone and Hansen, 1993; Aldrich, 1993). Consider two individuals, one just old enough to vote in the 2008 election, versus one just too young to be eligible. The eligible individual is more likely to be targeted by campaigns and entered into campaign databases. These databases are recycled in future election cycles, so the individual is now more likely to be contacted by a campaign moving forward. If the individual votes in the election, then he or she is marked as a likely voter for future elections, further increasing the chances of being contacted by a campaign. Thus, subsequent campaigns are more likely to target the first individual, the potential voter for which they have more information, than the second individual (Hersh, 2015).

Campaign effects could explain heterogenous effects of voting across racial groups if the difference in probability of campaign contact in future elections for the two individuals varies by race. This might be the case if it is more difficult for campaigns to gather information on minority potential voters, so the impact of that initial vote – getting entered into the campaigns’ databases – is greater for minority voters. There is some evidence in support of this mechanism, as voter registration is lower amongst minorities than amongst Whites, and information sources such as the Census also tend to undercount minority groups (Visser, 2014; Hersh, 2015; Igielnik et al., 2018). Conversely, voter mobilization efforts have been found to reinforce or exacerbate turnout gaps via differential targeting (Enos, Fowler and

Vavreck, 2014). If campaigns do a worse job at mobilizing minority groups or targeting minority voters on their lists (see Stevens and Bishin (2011)), then campaigns could produce lower effects for minority groups.

In the context of the 2008 election, I expect that minority voters, and Black voters especially, should be most affected by persistent mobilization efforts in later elections. The 2008 election brought unprecedented numbers of first-time Black voters into the electorate, and minority turnout was instrumental in the electoral outcome. Therefore, political campaigns should be incentivized to capitalize on these new voters in later elections. Mobilization in this respect represents an alternative mechanism, distinct from psychological mechanisms, by which voting for the first time in the 2008 election could produce stronger effects on future voting for Blacks than for other racial groups. These mechanisms could work in tandem, and together strengthen the expectation of a stronger sustained mobilizing advantage for Blacks.

The effect of the 2008 election on future elections could also be driven by the introduction of voters into the electorate who otherwise would not develop the habit of voting. Turnout was generally high across demographic groups in the 2008 election. In a high turnout election, the voters added to the electorate are those who, on the margins, would not vote if the election featured lower rates of mobilization. Now that they are registered and have voted in one election, they may continue to vote. In this context, the group that has the most voters introduced to the electorate who otherwise would be most unlikely to become habitual voters is the group that will see the largest aggregate effect on future voting. This view of habitual voting would point to the subgroup with the lowest baseline registration or turnout rates, Hispanics, experiencing the greatest effects. I return to these alternative hypotheses in the results discussion, testing the effect of voting in 2008 on the likelihood of being registered in the future, to help clarify the observed effects on future voting.

3 Data

Data for this study come from 2016 and 2017 voterfiles for 25 states⁵. Each voterfile consists of a list of every registered voter in the state, with information on their partisanship, place of residence, date of birth, and whether or not they voted in past elections. The data are collected by state governments, and organized, maintained and provided to the researcher by L2, a nonpartisan firm that supplies researchers, candidates, political parties, and consultants with voterfile data for use in campaigns and other ventures. The regression discontinuity design employed in this study requires precise date of birth data. The quality of these data varies by state, and the 25 states in this analysis are those that provide accurate to-the-day date of birth. In total, the data contain lists of every registered voter in Alabama, Arkansas, California, Connecticut, Florida, Illinois, Indiana, Kansas, Kentucky, Massachusetts, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, Washington and West Virginia. All of the state voterfiles contain information on the race of the individual voters. For most states, the race of a voter is imputed by L2, using a model based on a voter’s name, age, gender and demographic data on their residential location. Three of the states in this analysis, Alabama, Florida and South Carolina, require that registrants identify their race. Pennsylvania and Tennessee provide an optional field. Imputation methods for race are consistently used by researchers in studies of voter turnout for racial groups (Enos, 2016; Fraga, 2016a; Imai and Khanna, 2016; Igielnik et al., 2018; Enos, Kaufman and Sands, 2019). Prior research has validated these imputations by comparing imputed race to self-reported race⁶. For example, Imai and Khanna (2016) show a false-positive rate in identifying Black registrants using the Florida voterfile of less than three percent.

⁵The dates for the voterfiles differ by state and range from December 2016 to March 2017

⁶In the Appendix, I show that the patterns observed in the main analysis are similar as those using just self-reported race.

Each state’s voterfile contains information on past voting behavior of individual registrants, but the quality and extent of voting history data varies by state. Some states purge inactive voters from lists after repeated election cycles where they do not vote. Others only keep track of voting history contingent on the voter registration not changing due to an out-of-state residential move. This under-counting of past voting will weight my results towards residentially stable voters. In general, the number of movers in and out of states from 2008 to the present is small in comparison to total state populations, and in-migration tends to match out-migration (Coppock and Green, 2016). Additionally, so long as voter purging or mobility is orthogonal to the 2008 eligibility cutoff date, it does not inhibit identification of the effect estimates.

However, variation in vote history data quality presents a challenge to this analysis in two ways. First, it makes it difficult to compare the effect of voting in different elections because vote history quality is correlated with how close the election in question is to the date of the voterfile. For example, in a 2017 voterfile, turnout in 2016 is measured more precisely than turnout in 2008. Voting in previous elections is undercounted. As shown in the Appendix, this undercounting tends to produce larger, albeit less precise, estimates of the effects on future voting for treatment elections that are further in the past. This is likely due to less active voters who voted in the treatment election being dropped from the lists, biasing the results upwards. Thus, it is difficult to directly compare, say, the effect of voting in 2000 to the effect of voting in 2008, or whether 2008 had a stronger effect on voting in 2012 or 2016, without accounting for trends in measurement quality. In the analysis, I compare across treatment elections by weighting by the precision of the estimates and by controlling for the years of the treatment and outcome elections. Given the data, this approach allows for a best possible comparison.

Second, it is possible that voters of different racial groups are more or less likely to be purged from voterfiles, either due to differences in mobility rates or failure to vote in multiple

election cycles. To the best of my knowledge, there are not yet conclusive empirical tests of the extent to which differences in voter purging across racial groups exists across states, but there are at least examples where minority voters are more likely to be removed from voter rolls for inactivity than White voters (Casey, 2019). If true, it would make cross-group comparisons, even within the same treatment election, difficult. If Blacks were being undercounted relative to other racial groups, we might expect their CACE estimates to be inflated, because the sample of Blacks for whom I observe 2008 voting would consist of the most politically active of the group⁷.

The data in this analysis demonstrate that the effect of voting for the first time in 2008 on future voting for Blacks is not overall greater than the effect on future voting for Whites or Hispanics. For differential changes in registration status to spuriously generate the observed patterns in the data – to incorrectly find that first-time 2008 Black voters had lower effects on future participation than other racial groups – if those patterns did not exist in the full population, it would have to be the case that 1) Blacks who voted in 2008 were disproportionately removed from voter lists at greater rates than Whites and Hispanics, and 2) that this removal was *inversely* correlated with voter inactivity. If Blacks who had voted in 2008 and wanted to vote in later elections but could not due to removal from voter lists were removed at greater rates than other racial groups, then the effects for Blacks would be under-estimated. This scenario seems unlikely, as voters are generally removed from voter lists after periods of inactivity – non-participation in multiple election cycles. So, if Blacks are disproportionately removed from voter lists compared to Whites and Hispanics, this is more likely to understate the extent to which Whites and Hispanics saw a larger increase on future voting compared to Blacks⁸.

⁷The removal of voters who voted in 2008 but are not present in the 2017 voterfile leads to an undercounting of compliance with treatment, or an undercounting of voting in 2008. This undercounting should increase the ratio of votes cast in later elections to votes cast in 2008, thus potentially producing a larger estimate of the effect of 2008 voting on future voting.

⁸Alternatively, if removal from voter lists is positively correlated with voter inactivity, then Blacks would

4 Empirical Strategy

I offer the following testable hypotheses derived from theories of habitual voting and group political empowerment:

H1: Voting in the 2008 election produced a larger increase in the probability of voting in later elections for Blacks than it does for other racial groups.

H2: Voting in the 2008 election produced a larger increase in the probability of voting in later elections for Blacks compared to the effect of voting for the first time in other recent presidential elections.

To test these hypotheses, I employ a fuzzy regression discontinuity design. The 2008 presidential election was on November 4, 2008. Anyone born November 4, 1990 or earlier was eligible to vote in the 2008 general election. Anyone born November 5 or later was ineligible to vote. This voting age restriction creates a fuzzy discontinuity, wherein passing the eligibility threshold increases an individual's probability of voting in 2008, while all those ineligible to vote have $\mathbb{P}(\text{Vote}_{2008}) = 0$. This design is useful because it isolates the causal effect of voting in 2008 on future voting. My theory of empowered habitual voting predicts that voting in an empowering election should produce a strong positive effect on future participation, all else held equal, and that this effect should be most pronounced for the empowered group. Thus, testing the theory requires isolating the effect of voting in 2008 on future voting⁹.

have to be removed from voter lists at lower rates than Whites and Hispanics to incorrectly make the inference that they were not seeing as strong effects of 2008 voting on future voting. While it is possible that Blacks are removed from voter lists at comparable or lower rates than Hispanics, it seems unlikely that Whites are removed at greater rates than Blacks.

⁹I only test the effect of voting in 2008 on future voting for first-time voters who are 18 in 2008. I am not able to test the effect of first-time voting for voters of other ages because the estimation of causal effects relies on the age eligibility discontinuity. Thus, these results are limited to first-time young voters.

The optimal design would analyze individual citizens as the units of analysis. However, the data only contain registered voters. To the extent that 2008 voting prompts future political participation, it should also affect future registration, and conditioning on registration introduces post-treatment bias into the design (Nyhan, Skovron and Titiunik, 2017). If two individuals are both registered to vote, where one received a past inducement to register while the other did not, then the individual who did not receive the treatment but still registered to vote is likely a more naturally politically zealous individual and may be more likely to vote than their treated counterpart. Thus, the results would be downward biased. While this might stand as a hard test of the hypotheses, it makes it harder to interpret the magnitude the effect, and limits the generalizability of a null or negative finding.

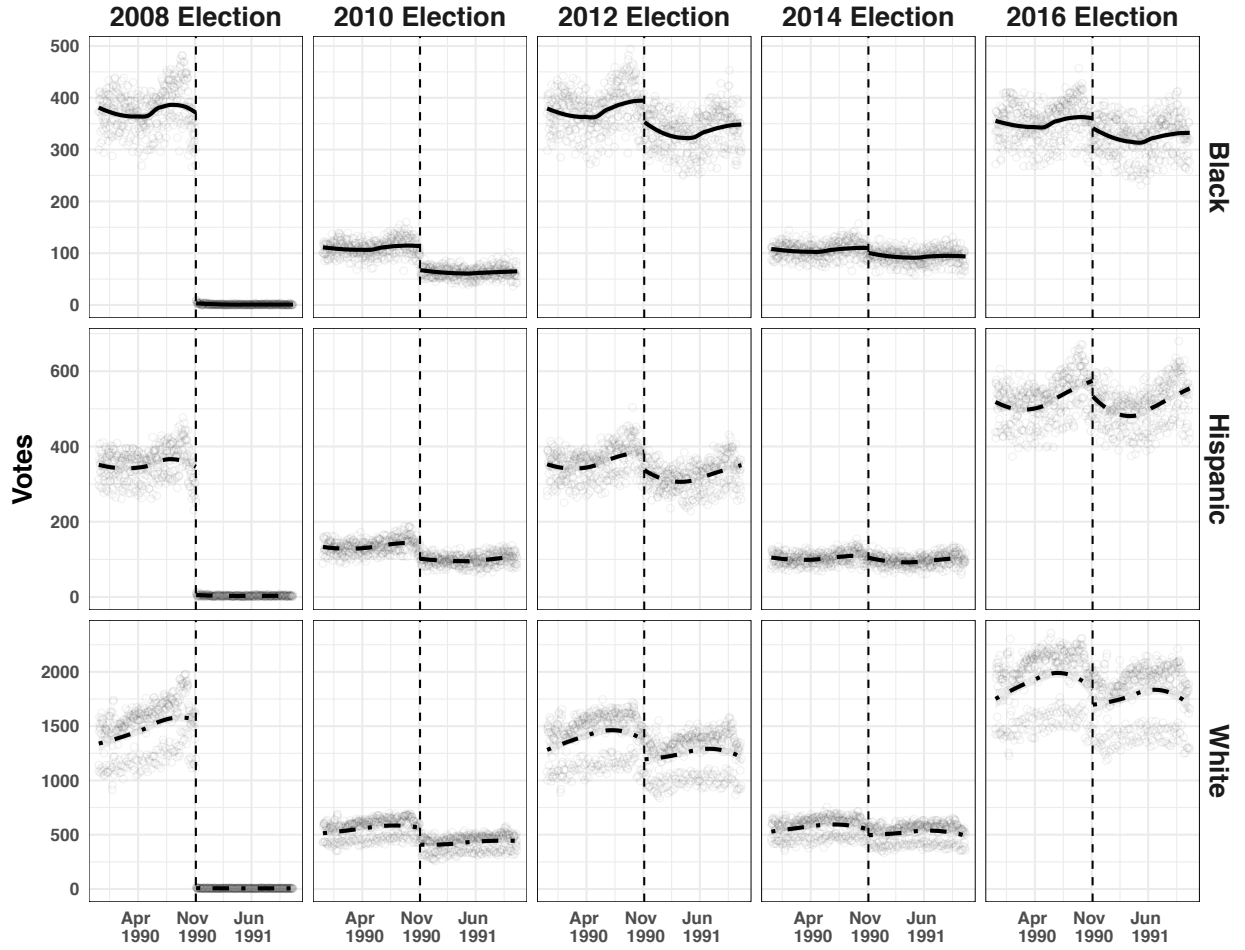
To address this concern, I employ a design similar to Coppock and Green (2016) and Meredith (2009), aggregating the data in the voterfile by date of birth, to produce daily counts of voting around the election eligibility cutoff. Each birth-day cohort represents the universe of United States citizens born on that day, and the measure of the predictor and outcome variables are the counts of votes produced in a given election by each birth-day cohort¹⁰. I transform the data for each of the 25 states in my dataset. Figure 1 visualizes daily vote counts around the cutoff for the pooled sample of each state, demonstrating that people who came of age in time to vote in 2008 voted at higher rates than those who came of age just after the 2008 election.

I estimate the complier average causal effect (CACE) of voting on future voting – the average treatment effect for units around the eligibility cutoff whose treatment status depends on whether they are eligible to vote. To calculate the CACE, I estimate a two-stage least squares (2SLS) estimator¹¹.

¹⁰Previous studies (see Meredith (2009)) account for birth trends using Natality data from the Center for Disease Control, analyzing rates of cohort voting rather than counts. The availability of these data is restricted for cohorts born in 1990 and later, so this approach is not possible. Instead, I account for variation in birth trends by including lagged measures of the dependent variables (as in Coppock and Green (2016))

¹¹The results are consistent across varying bandwidths and higher-order polynomials, as shown in the

Figure 1: Voting by Birthdate Cohort



Y-axis is the number of votes in the election for each birthday cohort. Lines are locally weighted smoothing models.

$$(1) \quad \widehat{\text{Vote}}_{1,i} = \alpha_0 + \alpha_1 Z_i + \alpha_2 X_i + \alpha_3 Z_i * X_i + \alpha_4 \text{Lagged Vote}_{2,i} + \epsilon_{1,i}$$

$$(2) \quad \text{Vote}_{2,i} = \beta_0 + \beta_1 \widehat{\text{Vote}}_{1,i} + \beta_2 X_i + \beta_3 \widehat{\text{Vote}}_{1,i} * X_i + \beta_4 \text{Lagged Vote}_{2,i} + \epsilon_{2,i}$$

where $\text{Vote}_{t,i}$ is the number of votes cast by birth-day cohort i in election t and Z_i is whether the birth-day cohort i is eligible to vote in election 1. X_i is the running variable, the number of days that birth-day cohort i is from the election eligibility cutoff¹². To account for seasonal and day-of-the-week birth trends, I include $\text{Lagged Vote}_{2,i}$, which represents the total number of votes cast in the outcome election by the birth-day cohort one year older than birth-day cohort i ¹³. Births are not distributed evenly across days of the week and time of year, and larger birth cohorts will likely have larger vote counts. Including the lagged variable controls for these patterns, conditional on the assumption that they are consistent in the immediate preceding year.

To determine treatment effects for different racial groups, I run separate 2SLS calculations on the data subset by racial group. This is done by constructing daily counts of votes by each racial group. The Wald estimator for a given racial group gives us the CACE for members of that racial group. For example, the CACE for Blacks is a result of comparing the future voting behavior of Blacks just too young to vote in the 2008 election to the future voting behavior of Blacks just old enough to vote in the election.

States differ in the norms and protocols for collecting and maintaining voter lists, so I conduct separate analyses for each state rather than run a pooled analysis or one where the unit of analysis is state-birthday cohort. I then calculated a fixed effects meta analysis

Appendix

¹²I use a 365-day bandwidth on either side of the eligibility cutoff. This bandwidth is consistently less than the bandwidth derived from the Imbens-Kalyanaraman method, across states and racial groups, but I use the 365 day bandwidth because larger bandwidths would not allow for inclusion of the Lagged Vote covariate. A bandwidth over 365 days would cause the lagged outcome to contain values from birth cohorts on the opposite side of the eligibility cutoff

¹³The corresponding $\text{Lagged Vote}_{1,i}$ for a given birth-day cohort is the birth-day cohort approximately a year older than birth-day cohort i , but adjusted to match the day of the week upon which birth-day cohort i was born. Leap days make this construction difficult and are not included in this analysis.

weighted average of the CACE estimates, weighting them by the inverse of their variances, to estimate across states the effect of 2008 voting,

$$\overline{\text{CACE}}_j = \frac{\sum_{s=1}^S \frac{1}{\hat{\sigma}_{js}^2} \widehat{\text{CACE}}_{js}}{\sum_{s=1}^S \frac{1}{\hat{\sigma}_{js}^2}}$$

where $\widehat{\text{CACE}}_{js}$ is the CACE estimate for outcome j for state s , and $\hat{\sigma}_{js}$ is the standard error of the CACE estimate for outcome j for state s . The fixed-effect meta analysis model assumes that the CACE estimates come from a single population, but accounts for different data generation processes by calculating the average of the estimates weighted by the inverse of their variances (Schwarzer, R. Carpenter and Rucker, 2015). This approach is employed in previous studies of voting habits (Coppock and Green, 2016), and places greater emphasis on the states with the largest voting populations for each racial group and the most precisely estimated effects. In the results section I present this estimate and the individual state results.

To compare the effect of 2008 voting to the effect of voting in other presidential elections, I also calculate the state-level CACE estimates of voting in the 2000, 2004 and 2012 presidential elections on voting in all subsequent elections. The ideal comparison is whether the effect of voting in 2008 on voting in the next election (2010) was greater than the effect of voting in, say, 2000, on voting in the next election (2002). Directly comparing these coefficients can be mis-informative, however, because quality of vote history is correlated with how much time has past between the treatment election and the year of the voterfile. Additionally, changes in electoral context further challenge comparisons between treatment elections. To make the most informed comparison, I use meta-analysis techniques to model the state-level CACEs in a weighted ordinary least squares regression, weighting by the inverse of the variance of the estimates. In the model, I test whether larger CACEs are correlated with a dummy variable for the 2008 election, and interact that variable with a dummy variable for Black

CACE. I further account for the year of the treatment and outcome elections, as well as whether the later election is a presidential election. I estimate this model on the subsample of Black state-level CACEs to test if 2008 was a uniquely mobilizing election for new Black voters (Model 1). I also estimate the model on the full sample of Black, White, and Hispanic state-level CACEs to see if Blacks enjoyed a unique mobilizing advantage over other racial groups in 2008 compared to other presidential elections (Model 2). Both models include state fixed effects to make within state comparisons of different voting effects.

$$(1) \quad \text{CACE}_{s,t,j} = \beta_0 + \beta_1 \text{2008 Election}_t + \beta_2 \text{Presidential}_j + \beta_3 \text{Treatment Election Year}_t + \beta_4 \text{Outcome Election Year}_j + \lambda_s + \epsilon_{s,t,j}$$

$$(2) \quad \text{CACE}_{s,t,j} = \beta_0 + \beta_1 \text{2008 Election}_t + \beta_2 \text{Black}_{s,t,j} + \beta_3 \text{2008 Election}_t * \text{Black}_{s,t,j} + \beta_4 \text{Presidential}_j + \beta_5 \text{Treatment Election Year}_t + \beta_6 \text{Outcome Election Year}_j + \lambda_s + \epsilon_{s,t,j}$$

where subscript s denotes the state, subscript t denotes the treatment election, subscript j denotes the outcome election, λ_s is the state fixed effect, and $\epsilon_{s,t,j}$ is the error term.

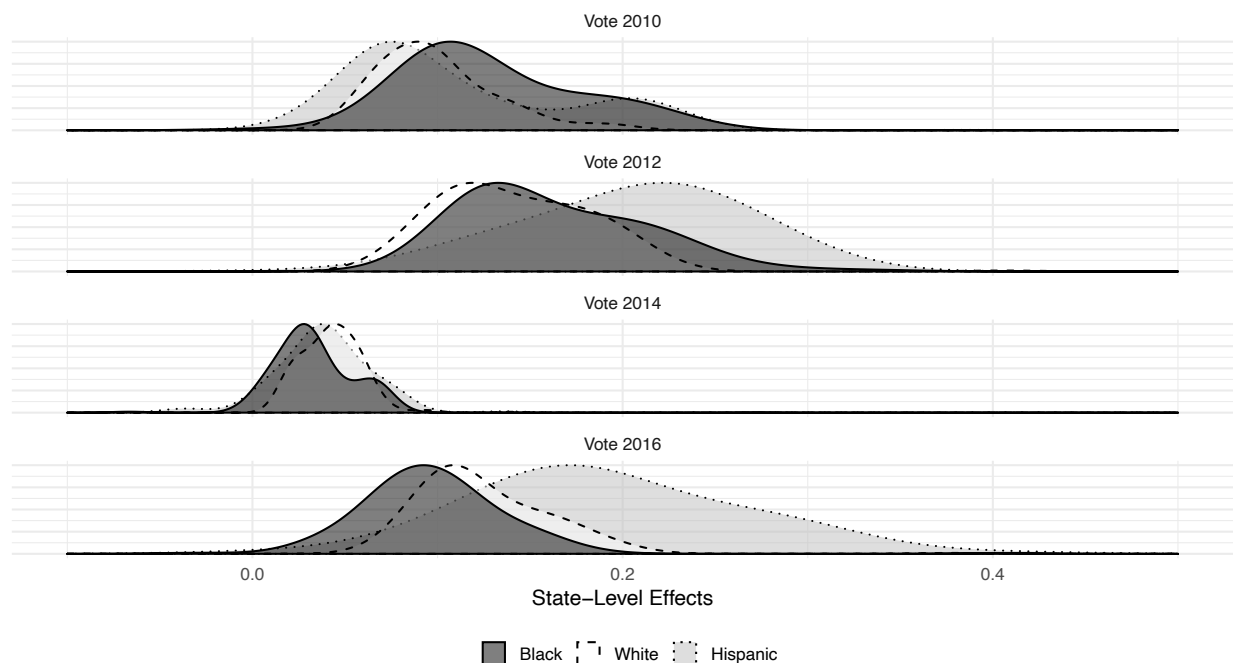
5 Results

5.1 Was Voting in 2008 Most Mobilizing for Blacks?

The results demonstrate that Black voters who voted in 2008 initially received the largest boost to their likelihood of voting in the next general election, but this advantage disappeared in subsequent elections. Figure 2 presents the distributions of the the state-level CACEs of 2008 voting on future voting, weighted by the inverse of the estimates' variances. The distributions illustrate the shift from a Black mobilizing advantage in 2010 to the effects for Blacks lagging behind those for Whites and especially those for Hispanics in ensuing elections. Tables 1 and 2 present the estimated CACE of voting in 2008 on voting in the 2010, 2012, 2014 and 2016 general elections for each state and racial group. The estimates

measure the increase in the number of votes in the later election that a birth-day cohort gains for each additional predicted vote in 2008 (from the first stage equation). This translates to the percentage point increase in an individual’s probability of voting in the later election. For each racial group, voting in 2008 increases the likelihood of voting in future elections. The results are generally statistically reliable, although we do observe estimates for Blacks and Hispanics that are not significant at conventional thresholds in states with low Black or Hispanic populations.

Figure 2: Weighted Distributions of State-Level Voting Effects



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

In 2010, we observe higher CACE estimates for Blacks than for other racial groups across states. The meta-analysis weighted average for Blacks was 0.128 with a standard error of just 0.003, measurably distinct from the effect of 0.110 for Hispanics (0.004 standard error) and the effect of 0.101 for Whites (0.002 standard error). So, for at least one election cycle, Blacks who voted in 2008 experienced a larger increase in their likelihood of future voting

than White or Hispanics.

In 2012 the effect for Blacks is still on average larger than the effect for Whites, but the effect for Hispanics are largest. These effects are generally larger than the effects on 2010 voting. Midterm elections see substantially lower turnout than presidential elections, which may depress results. Additionally, the marginal voter mobilized in a presidential election may be particularly unlikely to vote in a midterm election. Regardless, Black voters no longer see the highest effects, largely due to the increase in the CACE estimates for Hispanics.

The estimates for 2014 are much lower than the estimates for 2012 or 2010. This may be a function of lower turnout in this election compared to the other post-2008 elections. Generally, there is no distinguishable differentiation between racial groups in the effect of 2008 voting on 2014 voting. In 2016, we observe results closer in magnitude to 2010 and 2012, but 16 of the 25 states have the largest effects for Hispanics. There are only two states where Blacks have the largest effects and 7 with largest effects for Whites. The weighted average for Hispanics is the largest, followed by Whites, then Blacks. Each of these weighted averages is statistically distinct.

Table 1: Effect of 2008 voting on 2010 and 2012 voting

	2010						2012					
	White		Black		Hispanic		White		Black		Hispanic	
AL	0.135	(0.014)	0.176	(0.014)	0.115	(0.061)	0.165	(0.027)	0.151	(0.028)	0.212	(0.101)
AR	0.107	(0.021)	0.215	(0.04)	0.182	(0.099)	0.199	(0.04)	0.334	(0.08)	-0.008	(0.213)
CA	0.191	(0.011)	0.191	(0.019)	0.204	(0.009)	0.177	(0.019)	0.220	(0.033)	0.209	(0.017)
CT	0.101	(0.013)	0.109	(0.035)	0.092	(0.026)	0.209	(0.023)	0.226	(0.064)	0.217	(0.052)
FL	0.094	(0.008)	0.101	(0.01)	0.067	(0.01)	0.106	(0.02)	0.130	(0.023)	0.126	(0.024)
IL	0.096	(0.008)	0.129	(0.014)	0.133	(0.015)	0.087	(0.018)	0.128	(0.028)	0.162	(0.031)
IN	0.077	(0.009)	0.070	(0.02)	0.047	(0.029)	0.118	(0.018)	0.142	(0.044)	0.289	(0.069)
KS	0.108	(0.012)	0.055	(0.044)	0.025	(0.038)	0.090	(0.024)	0.125	(0.111)	0.159	(0.08)
KY	0.135	(0.017)	0.128	(0.035)	0.101	(0.084)	0.135	(0.03)	0.179	(0.066)	0.460	(0.156)
MA	0.074	(0.011)	0.136	(0.035)	0.095	(0.031)	0.158	(0.024)	0.131	(0.077)	0.141	(0.066)
MD	0.118	(0.013)	0.147	(0.014)	0.144	(0.03)	0.119	(0.027)	0.115	(0.03)	0.187	(0.064)
MO	0.092	(0.012)	0.218	(0.029)	0.024	(0.052)	0.183	(0.022)	0.281	(0.057)	0.293	(0.086)
NE	0.062	(0.013)	0.005	(0.035)	0.052	(0.041)	0.150	(0.025)	0.204	(0.116)	-0.101	(0.118)
NV	0.144	(0.025)	0.177	(0.05)	0.230	(0.03)	0.159	(0.036)	0.095	(0.11)	0.254	(0.054)
NY	0.100	(0.007)	0.103	(0.01)	0.075	(0.01)	0.195	(0.017)	0.207	(0.024)	0.269	(0.025)
OH	0.091	(0.008)	0.101	(0.014)	0.043	(0.033)	0.111	(0.019)	0.123	(0.029)	0.076	(0.077)
OR	0.105	(0.017)	0.034	(0.101)	0.125	(0.041)	0.115	(0.025)	0.145	(0.153)	0.122	(0.067)
PA	0.136	(0.007)	0.216	(0.013)	0.104	(0.017)	0.154	(0.016)	0.185	(0.027)	0.264	(0.04)
RI	0.065	(0.025)	-0.127	(0.069)	0.154	(0.042)	0.119	(0.041)	0.075	(0.209)	0.271	(0.073)
SC	0.162	(0.014)	0.188	(0.014)	0.192	(0.065)	0.185	(0.028)	0.117	(0.031)	0.254	(0.11)
TN	0.069	(0.011)	0.104	(0.013)	0.068	(0.049)	0.112	(0.024)	0.179	(0.032)	0.044	(0.118)
TX	0.068	(0.009)	0.112	(0.015)	0.074	(0.012)	0.127	(0.02)	0.237	(0.031)	0.230	(0.024)
VA	0.068	(0.008)	0.100	(0.011)	0.081	(0.022)	0.126	(0.023)	0.130	(0.029)	0.225	(0.053)
WA	0.611	(0.043)	-0.010	(0.267)	0.386	(0.084)	0.406	(0.065)	-0.878	(0.516)	0.208	(0.142)
WV	0.060	(0.019)	0.073	(0.076)	0.108	(0.154)	0.092	(0.032)	0.072	(0.138)	-0.014	(0.251)
Meta	0.101	(0.002)	0.128	(0.003)	0.110	(0.004)	0.143	(0.005)	0.162	(0.008)	0.205	(0.009)

Robust standard errors in parentheses.

Black CACE estimates are bolded when they are the largest significant estimate for the state-outcome.

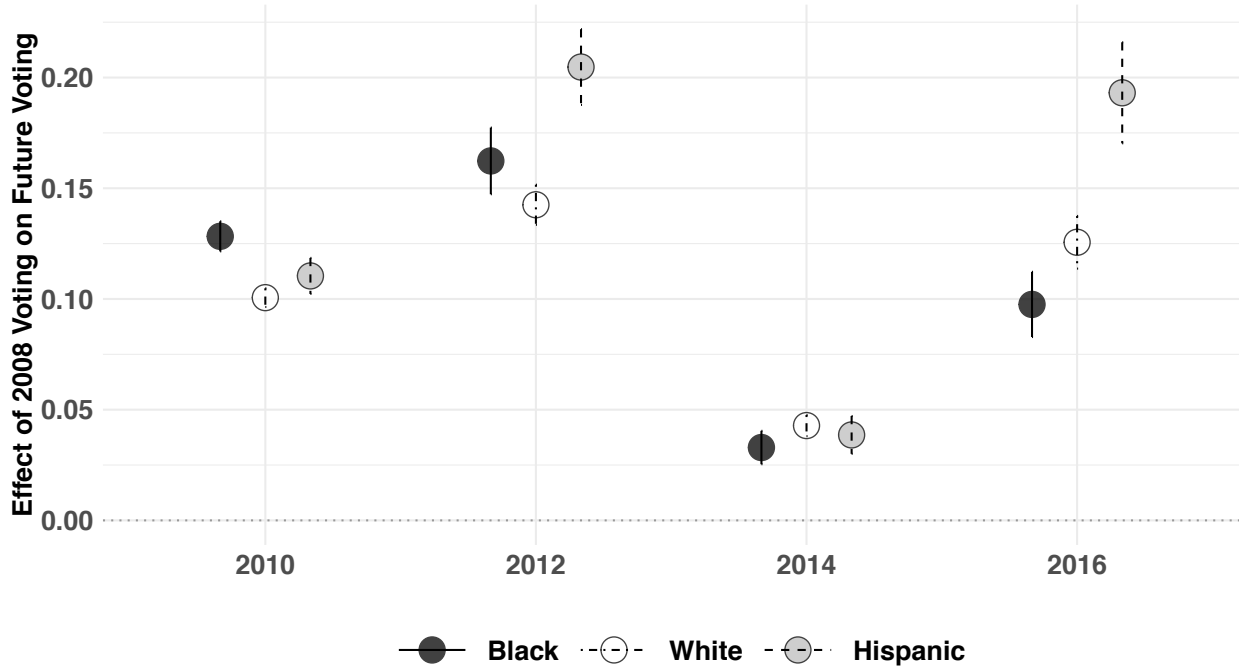
Table 2: Effect of 2008 voting on 2014 and 2016 voting

	2014						2016					
	White		Black		Hispanic		White		Black		Hispanic	
AL	0.029	(0.013)	0.019	(0.015)	0.041	(0.055)	0.110	(0.037)	0.067	(0.027)	0.180	(0.134)
AR	0.075	(0.032)	0.054	(0.063)	0.070	(0.163)	0.177	(0.05)	0.126	(0.088)	0.747	(0.298)
CA	0.059	(0.009)	0.019	(0.018)	0.035	(0.008)	0.167	(0.025)	0.150	(0.034)	0.170	(0.023)
CT	0.066	(0.016)	0.019	(0.04)	0.037	(0.031)	0.105	(0.03)	0.148	(0.064)	0.264	(0.065)
FL	0.047	(0.012)	0.067	(0.012)	0.048	(0.015)	0.101	(0.027)	0.110	(0.022)	0.114	(0.032)
IL	0.058	(0.011)	0.059	(0.017)	0.061	(0.018)	0.124	(0.025)	0.086	(0.027)	0.227	(0.045)
IN	0.037	(0.008)	0.001	(0.02)	0.000	(0.029)	0.107	(0.022)	0.091	(0.046)	0.231	(0.082)
KS	0.047	(0.017)	0.040	(0.047)	-0.040	(0.054)	0.099	(0.029)	-0.031	(0.093)	0.195	(0.103)
KY	0.094	(0.022)	0.052	(0.046)	0.255	(0.13)	0.098	(0.04)	0.102	(0.074)	0.513	(0.225)
MA	0.046	(0.014)	0.033	(0.043)	0.001	(0.035)	0.159	(0.033)	0.103	(0.082)	0.179	(0.077)
MD	0.028	(0.017)	0.030	(0.015)	0.076	(0.036)	0.117	(0.031)	0.094	(0.03)	0.273	(0.077)
MO	0.043	(0.01)	0.037	(0.025)	0.058	(0.045)	0.150	(0.03)	0.177	(0.058)	0.399	(0.113)
NE	0.041	(0.017)	-0.066	(0.052)	0.007	(0.064)	0.189	(0.034)	0.409	(0.121)	0.107	(0.168)
NV	0.033	(0.02)	0.036	(0.041)	0.049	(0.022)	0.201	(0.046)	0.032	(0.128)	0.300	(0.064)
NY	0.041	(0.009)	0.010	(0.011)	0.014	(0.011)	0.152	(0.024)	0.089	(0.024)	0.174	(0.035)
OH	0.020	(0.007)	0.029	(0.013)	-0.035	(0.032)	0.083	(0.02)	0.074	(0.028)	0.018	(0.081)
OR	0.070	(0.019)	0.273	(0.124)	0.077	(0.059)	0.138	(0.032)	0.391	(0.169)	0.125	(0.089)
PA	0.053	(0.008)	0.028	(0.015)	0.041	(0.019)	0.108	(0.023)	0.118	(0.028)	0.192	(0.051)
RI	0.041	(0.028)	0.050	(0.099)	0.135	(0.049)	0.089	(0.049)	0.083	(0.181)	0.296	(0.086)
SC	0.059	(0.015)	0.047	(0.016)	0.081	(0.068)	0.175	(0.04)	0.040	(0.028)	0.289	(0.177)
TN	0.019	(0.012)	0.037	(0.013)	0.036	(0.064)	0.102	(0.034)	0.112	(0.028)	0.113	(0.15)
TX	0.048	(0.01)	0.069	(0.018)	0.073	(0.014)	0.126	(0.031)	0.149	(0.031)	0.284	(0.037)
VA	0.027	(0.01)	0.028	(0.012)	0.049	(0.024)	0.112	(0.028)	0.072	(0.029)	0.137	(0.061)
WA	0.141	(0.038)	0.080	(0.254)	0.036	(0.078)	0.379	(0.079)	-1.133	(0.618)	0.410	(0.188)
WV	0.041	(0.02)	-0.123	(0.083)	0.047	(0.142)	0.119	(0.042)	0.025	(0.135)	-0.102	(0.303)
Meta	0.043	(0.002)	0.033	(0.004)	0.039	(0.004)	0.126	(0.006)	0.098	(0.008)	0.193	(0.012)

Robust standard errors in parentheses.

Black CACE estimates are bolded when they are the largest significant estimate for the state-outcome.

Figure 3: Weighted Averages of State-level Effects



Points represent the meta analysis weighted average of state-level CACE estimates, weighted by the inverse of the variance of the estimates. Bars represent 95% confidence intervals.

The results show that voting in 2008 increased the likelihood of voting in future elections for each racial group. The state CACE estimates fall within the range seen in Coppock and Green (2016). Figure 3 shows the CACE estimates and 95% confidence intervals for the meta analysis weighted averages. While I do observe stronger mobilizing effects for Blacks in the 2010 election, this relative hierarchy does not persist. Hispanics experience on average the largest future mobilizing effects as a result of voting in the 2008 election. Thus, the evidence does not support the hypothesis that voting for the first time in the 2008 election produced greater mobilizing effects for Blacks compared to voters of other racial groups.

5.2 Was 2008 a Uniquely Mobilizing Election for Blacks?

While the 2008 election did not produce stronger mobilizing effects for Blacks compared to other racial groups, perhaps the election was uniquely mobilizing, in that Blacks who

voted for the first time in 2008 experienced a greater increase in their likelihood of voting in the future compared to those who voted for the first time in other presidential elections. Additionally, perhaps the disadvantage in mobilizing effects between Blacks and other racial groups observed above is smallest from the 2008 election compared to other elections, indicating that, while Blacks are still experiencing smaller effects, 2008 may still be more potent for Blacks than other groups conditional on baseline mobilizing effects. To test this, I compare the effect of voting in 2008 to the effect of voting in other recent presidential elections (2000, 2004, 2012) on all subsequent elections from 2002 through 2016. I estimate these effects with the same voterfile data as the 2008 effects. The full results for each election year are presented in the Appendix, but here I present two analyses to directly test if 1) Blacks who voted for the first time in 2008 experienced a greater mobilizing boost than Blacks who voted for the first time in other presidential elections, and 2) how the comparison between Blacks and other racial groups in 2008 looks in reference to other presidential elections.

I estimate models predicting state-level CACEs as a function of whether the treatment election of the CACE is 2008, and that variable interacted with the corresponding racial group of the CACE. To test whether 2008 was a uniquely mobilizing election for Blacks in absolute terms, I estimate the model on the subset of state-level CACEs for Blacks. A positive and significant coefficient on the 2008 Treatment Election variable would indicate that 2008 did produce a larger mobilizing effect for Blacks than other elections. To test whether the gap between Black mobilizing effects and non-Black mobilizing effects is smallest for 2008, I estimate the model on the full sample of Black, White, and Hispanic state-level CACEs, focusing on the coefficient on the interaction of 2008 Treatment Election dummy variable and Black dummy variable. I estimate each model using Weighted Least Squares, weighting by the inverse of the variance of the estimates, but also report the models from unweighted Ordinary Least Squares models. Across models, 2008 is not statistically distinguishable from other presidential elections in its mobilizing effects for Blacks. Table 3 reports the results

Table 3: Modeling State-Level Effects to Compare 2008 to Other Presidential Elections

	<i>Dependent Variable: Effect of Voting on Future Voting</i>			
	Black CACEs		All CACEs	
	<i>Weighted OLS</i>	<i>OLS</i>	<i>Weighted OLS</i>	<i>OLS</i>
2008 Treatment Election	0.003 (0.005)	−0.038 (0.039)	−0.015*** (0.004)	−0.027 (0.026)
Presidential Outcome Election	0.081*** (0.007)	0.106*** (0.029)		
Black			−0.006 (0.006)	−0.069*** (0.020)
Outcome Election Year	−0.014*** (0.001)	−0.005 (0.004)	−0.004*** (0.001)	0.010*** (0.002)
Treatment Election Year	0.004*** (0.001)	−0.011** (0.005)	−0.004*** (0.001)	−0.025*** (0.003)
2008 Treatment Election * Black			0.013 (0.008)	0.022 (0.042)
Constant	18.967*** (1.923)	32.891*** (9.167)	15.786*** (1.070)	31.503*** (5.211)
Fixed Effects	State	State	State	State
N	454	454	1,374	1,374

*p < .1; **p < .05; ***p < .01

Weighted OLS models are weighted by the inverse of the variance of the estimates. Controls include whether the outcome election is a Presidential election (mobilizing effects are larger in these elections) and the years of the treatment and outcome elections (to account for how age of vote history influences measurement of CACEs). All models use state-fixed effects to make within-state comparisons. Some state CACEs for 2000 and 2004 were not estimable due to low Black and Hispanic populations and were dropped from the models.

for the four models. On the subsample of Black state-level CACEs, the coefficient on the 2008 treatment election is not statistically distinguishable from zero. On the full sample the interaction of 2008 treatment election and Black CACE is similarly not statistically distinguishable from zero. Thus, the evidence indicates that, despite its nominally empowering features, voting for the first time in 2008 was not uniquely mobilizing for Blacks.

5.3 Effect of 2008 Voting on Future Registration and Partisanship

Next, I present the effect of voting in 2008 on future registration and partisanship. While the effect of 2008 voting on future voting most directly addresses the hypotheses put forth in this paper, examining the effect of voting for the first time in 2008 on the likelihood of being registered in the future, and its effect on future partisanship, is clarifying in two primary ways. First, in the United States, the registration and party systems present major obstacles to participation (Powell, 1986), and political empowerment can spur minority group turnout by helping minority voters overcome structural and institutional obstacles to voting (Walton, 1985). Measuring the effect of voting for the first time in 2008 on the likelihood of being registered in the future should help disentangle the extent to which the lack of a mobilizing advantage for Blacks compared to other racial group is a result of differential effects on future registration versus differential effects on behavioral determinants of habitual voting, such as stronger attachments to politics. Second, analyzing future partisanship as an outcome clarifies one mechanisms by which voting in 2008 could produce empowering effects on habitual voting, by producing stronger and more persistent ties for first-time voters to the Democratic party.

Estimation for these outcomes is the same as in the main voting specifications, but the outcome is the number of registered voters or registered Democrats or Republicans in each birth-day cohort. Similar to the main analysis, I estimate the effects separately for each state and racial group, and then calculate the fixed-effects meta analysis weighted average

across states¹⁴ for each racial group. Thus, I compare the the effect of voting in 2008 on being registered, and on being registered as a Democrat or Republican, in 2016/2017. To calculate the CACEs, I again estimate a two-stage least squares (2SLS) estimator¹⁵.

For Blacks, voting for the first time in 2008 caused a 0.251 increase in the likelihood of being registered eight years later. This effect is comparable to the effect for first-time White voters (0.261), but notably less than the effect for first-time Hispanic voters (0.412). Figure 4 plots the meta-analysis weighted averages for the effect of 2008 voting on future registration, Democratic partisanship, and Republican partisanship for Blacks, Whites, and Hispanics, and Figure 5 presents the distribution of state-level effects. The effect for Blacks on future Democratic partisanship (0.251) is comparable to that for Hispanics (0.234), and greater than the effect for Whites (0.11). Blacks see effectively no increase in their likelihood of being a registered Republican eight years later as a result of voting in 2008, while Hispanics see a 0.044 increase and Whites see a 0.067 increase¹⁶.

¹⁴I estimate the effect on registration for all 25 states. Of the 25 states in my data, 15 record partisanship at the time of registration: Arkansas, California, Connecticut, Florida, Kansas, Kentucky, Massachusetts, Maryland, Nebraska, Nevada, New York, Oregon, Pennsylvania, Rhode Island, and West Virginia. Thus, I limit the analysis of 2008 voting's effect on future partisanship to these 15 states. In the Appendix, I demonstrate the consistency of the main results on future voting and registration to this subset of states that record partisanship.

¹⁵

$$(1) \quad \widehat{\text{Vote}}_{1,i} = \alpha_0 + \alpha_1 Z_i + \alpha_2 X_i + \alpha_3 Z_i * X_i + \alpha_4 \text{Lagged Registration}_{2,i} + \epsilon_{1,i}$$

$$(2) \quad \text{Registration}_{2,i} = \beta_0 + \beta_1 \widehat{\text{Vote}}_{1,i} + \beta_2 X_i + \beta_3 \widehat{\text{Vote}}_{1,i} * X_i + \beta_4 \text{Lagged Registration}_{2,i} + \epsilon_{2,i}$$

¹⁶The observed increase in the likelihood of being registered to both major parties is consistent with previous work by Meredith (2009).

Figure 4: Weighted Average of State-Level 2008 Voting Effects on Registration and Partisanship

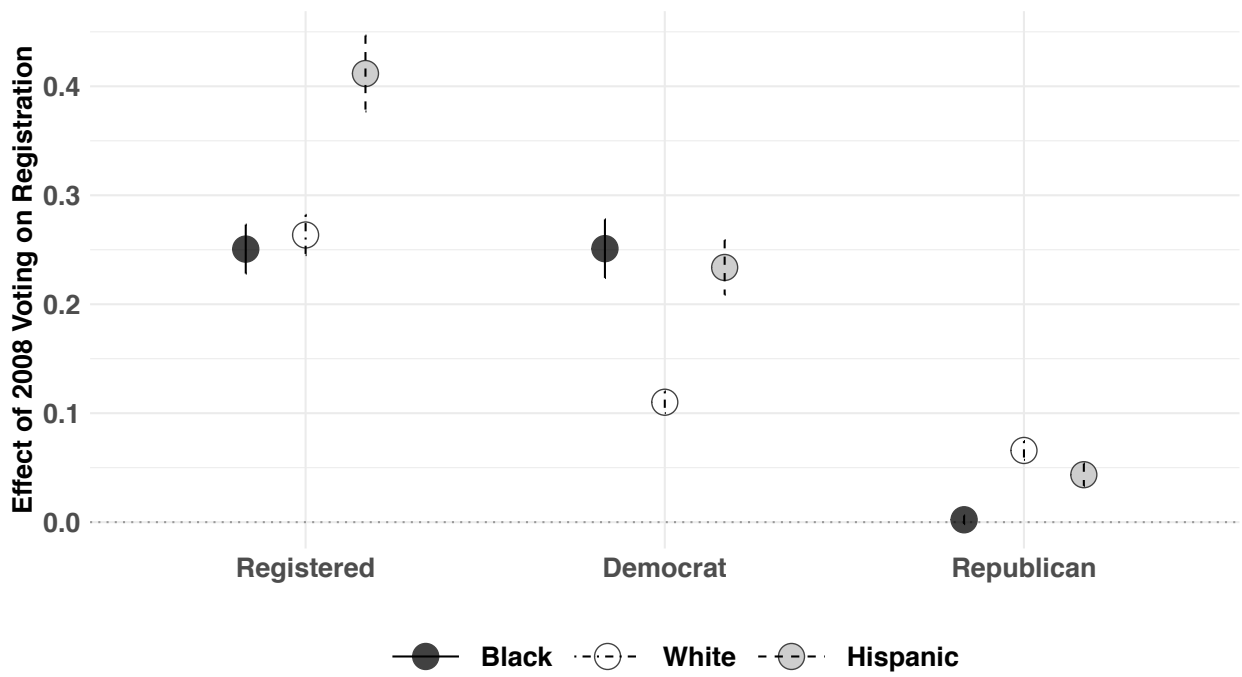
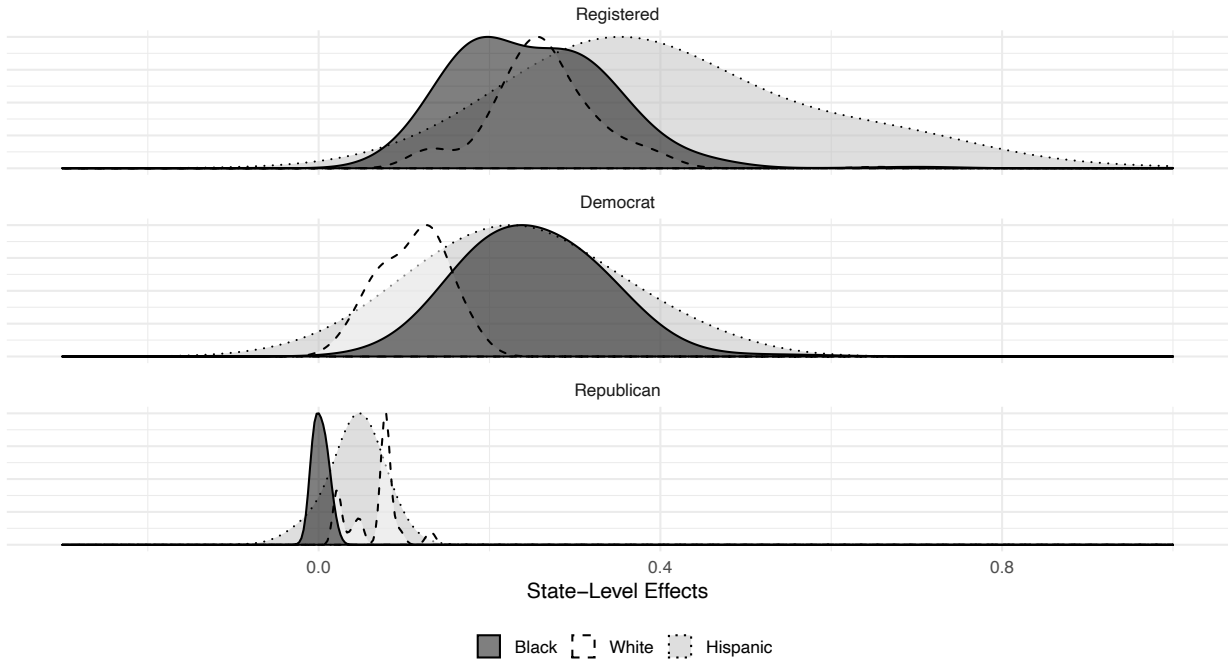


Figure 5: Weighted Distributions of State-Level 2008 Voting Effects on Registration and Partisanship



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

The effects on future registration mirror the effects on future voting. Voting for the first time in 2008 considerably increases the likelihood of being registered over 8 years later for Blacks, but this increase is not greater than the effect for Whites or Hispanics. These results provide further evidence against an empowerment model of habitual voting. The effect for Hispanics is higher than that for Blacks or Whites, consistent with this group's higher effects on future voting. These results suggest that part of the future mobilizing advantage for Hispanics is due to voting in 2008 having a greater effect on bringing Hispanic voters into the electorate and through helping Hispanic voters overcome obstacles to long-term registration.

The effects on partisanship provide some evidence, at least, that voting in 2008 produced

the strongest long-term attachments to the Democratic party for first-time Black voters. The effects for Blacks on future Democratic partisanship are slightly higher but comparable to those for Hispanics, and substantially higher than those for Whites. This trend suggests that at least one of the mechanisms by which political empowerment could produce habitual voting is fulfilled: stronger enduring ties to the party of President Obama. However, the effect on partisanship is not followed by stronger effects on future voting for Blacks compared to other racial groups.

6 Conclusion

This study presents the first test in the United States context of whether minority voters develop stronger voting habits in response to a first-time voting experience linked to their group’s political empowerment. The 2008 election is the election most prominently tied to Black political empowerment, and thus represents a “most likely case” to produce empowerment-driven habitual voting¹⁷. Yet, 2008 was not a unique formative voting experience for new Black voters, producing enduring participatory effects that lagged behind those of other racial groups and spurring similar effects on future voting for Blacks as other presidential elections. I do find that voting in 2008 produced stronger effects on future Democratic partisanship for Blacks compared to Whites and Hispanics, as well as evidence that voting in 2008 may have increased political interest and support for President Obama at greater rates for Blacks. Thus, some of the conditions under which 2008 might produce the largest effects on future voting through political empowerment were met, but these conditions were not followed by a sustained Black mobilizing advantage. Given the wealth of prior evidence that racial identity influences political behavior, it is noteworthy that empowerment on this scale does not produce enduring patterns of political participation.

¹⁷In the Appendix, I further demonstrate that 2012 also did not produce stronger mobilizing effects for Blacks. The 2012 election, the only other presidential election that resulted in the election of a Black president, should be the second most likely election to produce such effects, should the theory put forth in this paper hold.

Together, these results strongly suggest that group empowerment does not drive voting habits. First-time voting experiences with strong connections to racial group empowerment are not sufficient to produce heightened rates of political participation among the empowered group. Furthermore, these findings demonstrate that voting in the election of President Obama has not durably increased Black political participation in comparison to other groups. While President Obama’s campaign was successful in mobilizing unprecedented numbers of young Black voters, these voters saw a smaller increase in the likelihood of voting in later elections than their peers in other racial groups. As America’s political parties and presidential vote choice increasingly sort by race, electoral outcomes may increasingly be decided by racial group turnout. The 2016 presidential election was in part decided by reduced Black turnout in key states (Fraga et al., 2017). A sustained mobilizing advantage for Black voters from the 2008 election could have swung the election¹⁸.

This study provides a clear empirical test that finds strong evidence that Black political empowerment does not drive habitual voting, but the limitations of the analysis leave important questions for future research. First, the results in this analysis can only directly speak to the effect of voting for young voters. To what extent do the results extend to older first-time voters, or to voters generally? There are to date no empirical tests of age differences in voting habits, but younger voters may be at the life-cycle point where events most impact habit formation, so the effects for older first-time voters might be lower. With respect to the general effect of voting on future voting, it seems likely that the reifying effect of voting in an election when you have already voted before is not going to exhibit as strong an effect on future voting as a first-time voting experience. However, given that the effect of voting for the first time on future voting is large in magnitude, there is still room for smaller effects to

¹⁸It may be the case that voting habit stems more from automaticity derived from the repetition of contextual stimuli (Aldrich, Montgomery and Wood, 2011). Within this framework, the uniqueness of 2008 for Black voters could reduce automaticity effects, as later elections may be notably different in their implications.

have significant electoral consequences. Most importantly for the conclusions of this paper, I cannot rule out that voting in the 2008 election produced meaningfully different effects on future voting for voters of older ages, nor that these effects were stronger for Black voters than for voters of other racial groups.

Second, the larger effects for Hispanics are not congruent with the theory and hypotheses tested in this analysis. While I am hesitant to speculate post-hoc as to what drives the larger effects for Hispanics, I at least note that the striking results for Hispanic voters could be the result of mobilization efforts being most effective for this otherwise lower participation group. This explanation is in line with a mobilization-based (Fraga, 2016a, 2018), rather than an empowerment-based, effect¹⁹. The effects on future registration further support this alternative model, as the larger voting effect for Hispanics could have been driven by larger effects on future registration, as new voters were brought into the electorate who otherwise would not have become regular voters.

Third, while I find some evidence of an empowering effect of the 2008 election along attitudinal and partisan preference dimensions, these shifts do not translate into greater behavioral effects. Evidence from across the behavioral sciences demonstrates that attitudes do not necessarily predict behavior, as behavioral choices require deliberation between multiple, often competing interests – such as social norms or institutional contexts – that may limit the influence of attitudinal change (Tankard and Paluck, 2017; Enos and Gidron, 2018). Future work can further disentangle which of these factors matter most for habitual voting.

Lastly, while I find no evidence of a Black political empowerment effect on voting habit at the national level, political empowerment may be a localized phenomenon. The first Black President, while an important milestone, may not represent the same level of political incorporation and control as a Black mayor and a majority Black city council represent to

¹⁹In the Appendix, I also test whether the cross-race comparisons look different in battleground states, which may have seen greater mobilization efforts in 2008 and later elections, but find that the results are similar in battleground and non-battleground states.

Black voters in municipal elections. Still, the best evidence of the effects of empowerment at the local level suggest that the mobilizing effect of empowerment is short-lived (Gilliam and Kaufmann, 1998; Spence and McClerking, 2010). The evidence presented here suggests that the limitations of empowerment at the national level are even more pronounced.

References

- Abrajano, M. and Z. Hajnal. 2015. *White Backlash: Immigration, Race, and American Politics*. Princeton University Press.
- Aldrich, John H. 1993. "Rational Choice and Turnout." *American Journal of Political Science* 37(1):246–278.
URL: <http://www.jstor.org/stable/2111531>
- Aldrich, John, Jacob Montgomery and Wendy Wood. 2011. "Turnout as a Habit." *Political Behavior* 33(4):535 – 563.
- Alt, James E. 1995. *Race and Voter Registration in the South*. Princeton University Press pp. 313–332.
URL: <http://www.jstor.org/stable/j.ctt7zvw6v.18>
- Atkinson, Matthew D. and Anthony Fowler. 2014. "Social Capital and Voter Turnout: Evidence from Saint's Day Fiestas in Mexico." *British Journal of Political Science* 44(1):41–59.
- Barreto, Matt A. 2007. "Si Se Puede! Latino Candidates and the Mobilization of Latino Voters." *American Political Science Review* 101(3):425–441.
- Barreto, Matt A., Gary M. Segura and Nathan D. Woods. 2004. "The Mobilizing Effect of Majority-Minority Districts on Latino Turnout." *American Political Science Review* 98(1):65–75.
- Bedolla, L.G. and M.R. Michelson. 2012. *Mobilizing Inclusion: Transforming the Electorate through Get-Out-the-Vote Campaigns*. The Institution for Social and Policy Studies Yale University Press.

- Bobo, Lawrence and Franklin D. Gilliam. 1990. "Race, Sociopolitical Participation, and Black Empowerment." *The American Political Science Review* 84(2):377–393.
URL: <http://www.jstor.org/stable/1963525>
- Brady, Henry E., Sidney Verba and Kay Lehman Schlozman. 1995. "Beyond Ses: A Resource Model of Political Participation." *The American Political Science Review* 89(2):271–294.
URL: <http://www.jstor.org/stable/2082425>
- Browning, R.P., D.R. Marshall and D.H. Tabb. 1984. *Protest is Not Enough: The Struggle of Blacks and Hispanics for Equality in Urban Politics*. University of California Press.
URL: <https://books.google.com/books?id=LBNfD-5G3L0C>
- Butler, D. and D.E. Stokes. 1971. *Political Change in Britain*. St. Martin's Press.
URL: <https://books.google.com/books?id=VlaIAAAAMAAJ>
- Campbell, A.L. 2003. *How Policies Make Citizens: Senior Political Activism and the American Welfare State*. Princeton studies in American politics : historical, international and comparative perspectives Princeton University Press.
- Campbell, Angus, Philip E. Converse, Warren E. Miller and Donald E. Stokes. 1960. *The American Voter*. University of Chicago Press.
- Casey, Nicholas. 2019. "Georgia Plans to Purge 300,000 Names From Its Voter Rolls." *New York Times* .
URL: <https://www.nytimes.com/2019/10/30/us/politics/georgia-voter-purge.html>
- Coppock, Alexander and Donald P. Green. 2016. "Is Voting Habit Forming? New Evidence from Experiments and Regression Discontinuities." *American Journal of Political Science* 60(4):1044–1062.

CPS. 2000-2014. “Current Population Survey, November Supplement.”.

URL: <https://www.census.gov/programs-surveys/cps.html>

Dawson, M.C. 1995. *Behind the Mule: Race and Class in African-American Politics*. Princeton paperbacks Princeton University Press.

de Kadt, Daniel. 2017. “Voting Then, Voting Now: The Long-Term Consequences of Participation in South Africa’s First Democratic Election.” *The Journal of Politics* 79(2):670–687.

Denny, Kevin and Orla Doyle. 2009. “Does Voting History Matter? Analysing Persistence in Turnout.” *American Journal of Political Science* 53(1):17–35.

Dinas, Elias. 2012. “The Formation of Voting Habits.” *Journal of Elections, Public Opinion and Parties* 22(4):431–456.

Dinas, Elias. 2013. “Opening ”Openness to Change”: Political Events and the Increased Sensitivity of Young Adults.” *Political Research Quarterly* 66(4):868–882.

Dinas, Elias. 2014*a*. “Does Choice Bring Loyalty? Electoral Participation and the Development of Party Identification.” *American Journal of Political Science* 58(2):449–465.

Dinas, Elias. 2014*b*. “Why Does the Apple Fall Far from the Tree? How Early Political Socialization Prompts Parent-Child Dissimilarity.” *British Journal of Political Science* 44(4):827–852.

Enos, Ryan D. 2016. “What the Demolition of Public Housing Teaches Us about the Impact of Racial Threat on Political Behavior.” *American Journal of Political Science* 60(1):123–142.

Enos, Ryan D., Aaron R. Kaufman and Melissa L. Sands. 2019. “Can Violent Protest Change Local Policy Support? Evidence from the Aftermath of the 1992 Los Angeles Riot.” *American Political Science Review* pp. 1–17.

- Enos, Ryan D., Anthony Fowler and Lynn Vavreck. 2014. "Increasing Inequality: The Effect of GOTV Mobilization on the Composition of the Electorate." *The Journal of Politics* 76(1):273–288.
- Enos, Ryan D. and Noam Gidron. 2018. "Exclusion and Cooperation in Diverse Societies: Experimental Evidence from Israel." *American Political Science Review* 112(4):742–757.
- Fowler, James H. 2006. "Habitual Voting and Behavioral Turnout." *Journal of Politics* 68(2):335–344.
- Fraga, Bernard, Brian Schaffner, Jesse Rhodes and Sean McElwee. 2017. "Why did Trump win? More whites and fewer blacks actually voted.".
URL: <https://www.washingtonpost.com/news/monkey-cage/wp/2016/03/09/does-social-science-have-a-replication-crisis>
- Fraga, Bernard L. 2016a. "Candidates or Districts? Reevaluating the Role of Race in Voter Turnout." *American Journal of Political Science* 60(1):97–122.
- Fraga, Bernard L. 2016b. "Redistricting and the Causal Impact of Race on Voter Turnout." *The Journal of Politics* 78(1):19–34.
- Fraga, B.L. 2018. *The Turnout Gap: Race, Ethnicity, and Political Inequality in a Diversifying America*. Cambridge University Press.
URL: <https://books.google.com/books?id=zBWNtgEACAAJ>
- Gay, Claudine. 2001. *The Effect of Minority Districts and Minority Representation on Political Participation in California*. San Francisco: Public Policy Institute of California.
- Gay, Claudine. 2002. "Spirals of Trust? The Effect of Descriptive Representation on the Relationship Between Citizens and Their Government." *American Journal of Political Science* 46(4).

- Gerber, Alan S., Donald P. Green and Ron Shachar. 2003. "Voting May Be Habit-Forming: Evidence from a Randomized Field Experiment." *American Journal of Political Science* 47(3):540–550.
- Gilliam, Frank D. 1996. "Exploring Minority Empowerment: Symbolic Politics, Governing Coalitions and Traces of Political Style in Los Angeles." *American Journal of Political Science* 40(1):56–81.
- Gilliam, Franklin D. Jr. and Karen Kaufmann. 1998. "Is there an Empowerment Life Cycle?: Long-Term Black Empowerment and its Influence on Voter Participation." *Urban Affairs Review* 33(6):741–766.
- Green, Donald P. 2004. "Mobilizing African-American Voters Using Direct Mail and Commercial Phone Banks: A Field Experiment." *Political Research Quarterly* 57(2):245–255.
- Green, Donald P. and Ron Shachar. 2000. "Habit Formation and Political Behaviour: Evidence of Consuetude in Voter Turnout." *British Journal of Political Science* 30(4):561–573.
- Green, D.P., B. Palmquist and E. Schickler. 2002. *Partisan Hearts and Minds: Political Parties and the Social Identities of Voters*. The Institution for Social and Policy Studies Series Yale University Press.
- Hersh, E.D. 2015. *Hacking the Electorate: How Campaigns Perceive Voters*. Cambridge University Press.
- Hutchings, Vincent L. and Nicholas A. Valentino. 2004. "The Centrality of Race in American Politics." *Annual Review of Political Science* 7(1):383–408.
- Igielnik, Ruth, Scott Keeter, Courtney Kennedy and Bradley Spahn. 2018. Commercial Voter Files and the Study of U.S. Politics. Technical report Pew Research Center.

URL: <http://www.pewresearch.org/methods/2018/02/15/commercial-voter-files-and-the-study-of-u-s-politics/>

Imai, Kosuke and Kabir Khanna. 2016. “Improving Ecological Inference by Predicting Individual Ethnicity from Voter Registration Records.” *Political Analysis* 24(2):263–272.

Jackman, Simon and Lynn Vavreck. 2010. “Primary Politics: Race, Gender, and Age in the 2008 Democratic Primary.” *Journal of Elections, Public Opinion and Parties* 20(2):153–186.

Leighley, J. 2001. *Strength in Numbers?: The Political Mobilization of Racial and Ethnic Minorities*. Strength in Numbers?: The Political Mobilization of Racial and Ethnic Minorities Princeton University Press.

URL: <https://books.google.com/books?id=qGFXAAAAYAAJ>

McDonald, Michael P. 2017. “United States Election Project.”.

URL: <http://www.electproject.org/>

Meredith, Marc. 2009. “Persistence in Political Participation.” *Quarterly Journal of Political Science* 4(3):187–209.

Mullainathan, Sendhil and Ebonya Washington. 2009. “Sticking with Your Vote: Cognitive Dissonance and Political Attitudes.” *American Economic Journal: Applied Economics* 1(1):86–111.

Nyhan, Brendan, Christopher Skovron and Rocío Titiunik. 2017. “Differential Registration Bias in Voter File Data: A Sensitivity Analysis Approach.” *American Journal of Political Science* 61(3):744–760.

Owens, Michael Leo and Jacob R. Brown. 2014. “Weakening Strong Black Political Empow-

- erment: Implications from Atlanta's 2009 Mayoral Election." *Journal of Urban Affairs* 36(4):663–681.
- Philpot, Tasha S., Daron R. Shaw and Ernest B. McGowen. 2009. "Winning the Race: Black Voter Turnout in the 2008 Presidential Election." *Public Opinion Quarterly* 73(5):995–1022.
- Plutzer, Eric. 2002. "Becoming a Habitual Voter: Inertia, Resources, and Growth in Young Adulthood." *The American Political Science Review* 96(1):41–56.
- Powell, G. Bingham. 1986. "American Voter Turnout in Comparative Perspective." *The American Political Science Review* 80(1):17–43.
URL: <http://www.jstor.org/stable/1957082>
- Rosenstone, S.J. and J.M. Hansen. 1993. *Mobilization, Participation, and Democracy in America*. Longman classics in political science Macmillan Publishing Company.
- Schuman, Howard and Jacqueline Scott. 1989. "Generations and Collective Memories." *American Sociological Review* 54(3):359–381.
- Schwarzer, Guido, James R. Carpenter and Gerta Rucker. 2015. *Meta-Analysis with R*.
- Sears, David O. and Nicholas A. Valentino. 1997. "Politics Matters: Political Events as Catalysts for Preadult Socialization." *The American Political Science Review* 91(1):45–65.
- Sinyangwe, Samuel. 2019. "First election I voted in was '08. Seeing Obama win helped establish a confidence in political engagement. When I hear younger folks say they're done voting after their candidate lost in '16/'18 I'm reminded how voter suppression impacting one election shapes long-term engagement.".
URL: <https://twitter.com/samswey/status/1173061290023104512>

- Spence, Lester K. and Harwood McClerking. 2010. "Context, Black Empowerment, and African American Political Participation." *American Politics Research* 38(5):909–930.
- Stevens, Daniel and Benjamin G. Bishin. 2011. "Getting Out the Vote: Minority Mobilization in a Presidential Election." *Political Behavior* 33(1):113–138.
- Tankard, Margaret E. and Elizabeth Levy Paluck. 2017. "The Effect of a Supreme Court Decision Regarding Gay Marriage on Social Norms and Personal Attitudes." *Psychological Science* 28(9):1334–1344. PMID: 28758838.
URL: <https://doi.org/10.1177/0956797617709594>
- Valenzuela, Ali A. and Melissa R. Michelson. 2016. "Turnout, Status, and Identity: Mobilizing Latinos to Vote with Group Appeals." *American Political Science Review* 110(4):615–630.
- Visser, M. Anne. 2014. "Two Plus Two Equals Three: Classification Error and the Hispanic Undercount in United States Census Surveys." *The American Review of Public Administration* 44(2):233–251.
- Walton, H. 1985. *Invisible Politics: Black Political Behavior*. Geraghty & Miller Environmental State University of New York Press.
URL: <https://books.google.com/books?id=c02ZphnmV4kC>
- Wong, Janelle S., Pei-Te Lien and M. Margaret Conway. 2005. "Group-Based Resources and Political Participation among Asian Americans." *American Politics Research* 33(4):545–576.
URL: <https://doi.org/10.1177/1532673X04270521>