The power of place? Testing the geographic determinants of African American and white voter turnout*

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Objective: This paper evaluates the geographic determinants of both white and African American voter turnout in presidential elections. We argue that perceptions of threat posed by African Americans influences white turnout, although the possibility of interracial contact can ameliorate these attitudes. Conversely, we contend the size of the co-ethnic population and segregation drives variations in African American turnout. Method: We utilize ArcGIS mapping software in conjunction with Census and turnout data from the state of Louisiana. We test our hypotheses using a series of hierarchical linear regressions. Results: We find that African American turnout is highest in parishes where African Americans represent a majority and segregation levels are low. White turnout is highest among whites in racially segregated, predominately white precincts. Conclusion: We conclude that different demographic factors drive variations white and African American turnout.

* Direct all correspondence to Eric Moore, Behavioral and Social Sciences Division, Central Piedmont Community College, PO Box 35009, Levine Campus LV 2448, Charlotte, North Carolina 28235 at eric.moore@cpcc.edu. Author Eric Moore will share all data and coding for replication purposes. The supplemental appendix can be found at https://fs.wp.odu.edu/jzingher/publications/.
There is a long tradition in political science of investigating how the racial composition of a geographic or political unit affects individuals’ voting behavior. Starting with V.O. Key’s (1949) seminal racial threat hypothesis and Gordon Allport’s (1954) contact hypothesis, scholars have assiduously taken up the task of determining when and where racial diversity either encourages or dampens political participation. The typical research design looks to explain how white political behavior varies as a function of the size and proximity of minority populations, implying that the distribution of minority populations is exogenous whereas white behavior is endogenous. What happens, however, when we examine the relationship between minority group turnout and the size and/or proximity of majority group populations? We contend that the contextual theories (threat and/or contact) used to explain the relationship between racial context and white behaviors are not well suited to explaining variations in African American turnout. We demonstrate this point by showing how the same demographic conditions affect whites and blacks’ propensity to vote in markedly different ways.

Even with less evidence on how racial context affects African Americans’ behaviors, we know that the rate of African American turnout varies considerably across states, counties, cities, and districts (Tate 1991; Hajnal and Trounstine 2005; Philpot et al. 2009; Fraga 2016; Barreto 2010; Bobo and Gilliam 1990). The evidence we present suggests that variations in white and African American turnout are driven by different mechanisms. At the parish-level, we find that white turnout is positively associated with the size of the out-group, while African American turnout is positively associated with the size of the in-group but dampened by high levels of interracial segregation. On the precinct-level, we show that segregation is associated with higher levels of white turnout but exerts little influence on African Americans.

Our effort to assess how the distribution of whites vis-à-vis African Americans affects turnout, and vice-versa, is organized into four sections. To begin with, we consider how an individual’s racial environment can affect their attitudes and behaviors. We then outline our measurement strategy in the second section. We utilize Geographic Information Systems (ArcGIS) mapping software in conjunction with precinct-level turnout data from Louisiana to construct measures of the racial environment spanning
the precinct and parish levels. Third, we test the relationship between turnout and the geographic
distribution of racial groups using a series of hierarchical linear models. We employ turnout data from the
2000, 2004, and 2008 presidential elections. We find that both African American and white turnout
increases as a function of the size of the African American population within a parish. Precinct-level
variables shape white turnout in important ways but do not affect African American turnout. We discuss
the implications and limitations of these findings in the final section.

1. The Effect of Racial Environment on Voter Turnout in the Deep South

We argue that different mechanisms help drive variations in minority and majority group turnout. We
begin this section by discussing the issues associated with studying political behavior when individuals
inhabit multiple, overlapping, geographic units and when variations in individual-level behavior are
clustered geographically. We then move on to discussing how racial environment, which we conceive as
the racial composition of ones’ home precinct and parish, can exert a different impact on whites’ and
African Americans’ propensity to turnout.

1.1 The Modifiable Areal Unit Problem

Before we consider how racial environment influences turnout, it is important to discuss a central issue in
the study of political geography: the proper unit of analysis. Individuals are clustered within Census
blocks, which are clustered within precincts, which are themselves clustered within counties and finally
states. With all of these options, what constitutes the “best” unit of analysis? There is evidence to suggest
that the smaller the unit the better, especially when discussing how context shapes behavior. The
downside of choosing larger units of analysis is that analysts are forced to assume that individual level
behavior remains constant within these larger units. Though previous research demonstrates that
individual level behavior often varies dramatically within states, counties, etc. because the social and
racial contexts that shape behavior vary as well (Hersh and Nall 2016, 290). The solution to this problem
is to start at the lowest level possible and aggregate up; this can account for the possibility that behavior
might vary within larger units in addition to across them. Therefore, we base our analysis on precinct
level data—the lowest geographical unit possible—in order to account for potential variation within larger units.

This does not imply that counties or state characteristics are unimportant. In fact, there is reason to assume that the characteristics of the larger units and that the politics within counties vary as a function of their racial composition (Feinburg et al 2017). Political competition is organized at the county (and state) as opposed to the precinct level. While we utilize the precinct as the empirical cornerstone, we are careful to account for how the characteristics of these larger geographic units shape behavior. If individuals respond to differences in political competition, the composition of the parish is likely of great importance. If individuals respond to local demographic context, the composition of the precinct is of great importance. In addition, it is important to keep in mind that an individual’s racial context does not necessarily align with the administrative unit (county, Congressional district, etc.) they inhabit (Wong et al 2012). Including multiple geographic units in our analysis helps to address this issue, and perhaps more importantly, address why studies that examine how racial context affects behavior often come to different conclusions depending on whether they look at the precinct or county level (Tam Cho and Baer 2011).

Having explained why we are interested in both the precinct and parish levels, we now turn our attention to detailing how we expect precinct and parish racial environment to shape white and African American turnout rates.

1.2 How Racial Environment Shapes White Turnout

Previous scholarship has identified two mechanisms that explain how racial context shapes an individual’s political behaviors. The first mechanism is racial threat, which was first articulated by V.O. Key (1949). Key’s hypothesis asserts that white mobilization against African American political interests is highest in counties where African Americans present the greatest threat to the political status quo (Giles 1977; Glaser 1994; Oliver and Mendelberg 2000; Oliver and Wong 2003; Voss and Miller 2001; Voss 1996; Baybeck 2006; Rocha and Espino 2009a; See Rocha and Espino 2009b; Zingher and Thomas 2014; Enos 2016). Population size is the mechanism driving Key’s threat hypothesis, as whites’ political behavior is conditional upon the size of the African American population. As the African American
population of a county increases (and presumably African American political power) so does white mobilization. Subsequent research that has its intellectual roots in Key’s threat hypothesis revolves around this assumption, with scholars finding evidence that out-group population affects implicit and explicit racial attitudes, policy positions, and ultimately behavior (Enos and Gideon 2016). The prediction here is that whites mobilize in response to African American political power within a county, which is a function of the African American population size. The threat hypothesis, however, has little to say about how the distribution of groups within a geographical might matter.

The claim that the distribution of groups, in addition to group size, can shape individual-level behavior was first popularized by the work of Gordon Allport (1954). Allport developed the contact hypothesis, which postulates that interracial contact reduces negative perceptions of out-groups and ultimately inter-group conflict. While large populations of out-group members can exacerbate perceptions of threat, the contact hypothesis posits that interracial contact mitigates these perceptions. There is a considerable amount of evidence that Allport was correct—increased interaction and familiarity between members of different groups can increase tolerance (Ellison and Powers 1994; Pettigrew and Tropp 2006) and has been found to reduce the level of support for nationalist or anti-immigrant parties (Della Posta 2013). The degree to which racial groups (in this case whites and African Americans) interact with one another has the potential to shape attitudes and behaviors (Enos and Gideon 2016) We contend the potential for interracial contact is largely determined by local demographics—namely the racial composition and level of segregation within the precinct.

The evidence that interracial contact can mitigate negative racial attitudes implies that segregation constitutes a key intervening variable. Segregation mitigates interracial contact. Diversity is likely to produce heightened perceptions of threat for whites when accompanied with high levels of interracial segregation. Conversely, we should observe decreased behavioral manifestations of threat, as measured by turnout, if the presence of racial out-groups is associated with low levels of segregation (Enos 2016). In other words, the likelihood of contact between in and out-group members decreases if racial groups live in a highly segregated area. In areas with low levels of segregation, however, we should expect a
greater likelihood of contact. Previous studies have found that whites in diverse and integrated political units are less likely to turnout than whites in diverse but segregated political units; a finding that has been attributed to a reduction in perceptions of threat among individuals in integrated precincts (Enos 2011; Zingher and Thomas, 2014; Enos 2016).

For whites, we expect precinct-level segregation levels to exert a stronger effect on turnout than parish-level segregation. The reason for this expectation is straightforward. Parishes are large geographic units, they range anywhere from 160 to just over 1300 square miles (Census 2010). Racial threat is about perception, and we argue that these perceptions are closely associated with conditions on the neighborhood level. Mitigation of threat, should it occur, is something that happens on the micro-level. Politics might be organized along racial lines in diverse counties, but individuals in diverse precincts might feel less threatened by out-groups should this diversity be accompanied by low levels of segregation. This could explain why studies examining the effect of diversity on the precinct-level tend to find different conclusions compared to those that examine the county/parish level (Tam Cho and Baer 2011). Taken in isolation, these findings seem to directly conflict. We contend, however, that we can gain a more nuanced understanding if we analyze the effect of diversity on two different levels.

1.3 How Racial Environment Shapes Black Turnout

Racial threat is about how the actions of the majority group (assumedly whites) are conditioned by minority populations. Yet even in the Deep South, where the African American population is the most densely concentrated, African Americans remain a minority in the vast majority of areas. This important caveat makes the threat hypothesis largely inapplicable for explaining African American turnout, given there are relatively few places where African American interests can prevail against the status quo. Under these conditions, minority groups face little incentive to become engaged in the political process when the odds of affecting the outcome is low and the costs of voting outweigh the benefits (Barreto, Segura, and Woods 2004, 67; Wolfinger and Rosenstone 1980; Bobo and Gilliam 1990, 379). Thus, we are still left with the question of how does racial environment condition minority political behavior.
We argue that in-group political power, as opposed to a reaction to whites, can explain variations in African American mobilization. Campbell (2005) found evidence that turnout is often highest in politically homogeneous communities, explaining that residents within these communities are driven by a heightened sense of civic duty as opposed to the probability that they will cast the pivotal ballot (Miller et al. 1981; Chong 1991). Homogenous communities engender a sense of community among individuals. Researchers have also found that community density leads to higher levels of perceived efficacy among racial minorities (Bobo and Gilliam 1990; Browning, Marshall and Tabb 1984; Gilliam and Kaufman 1998; Leighley 2001; Barreto, Segura, and Woods 2004; Fraga 2016). This greater sense of community and efficacy translates to individuals feeling a heightened sense of obligation and higher rates of political participation (Chong 1991; Dawson 1994; Fraga 2016). African American potential for political power, therefore, is largely determined by the size of the African American population within a parish/county.

It is important to note that we only expect a positive and significant relationship between African American turnout and African American population size at the parish-level as opposed to the precinct-level. Why this distinction? Precincts that contain a high proportion of minorities are often nested within majority white parishes where African Americans have little hope of controlling the political process. Therefore, the impact of in-group population size is only activated at higher units of aggregation. In other words, African American political efficacy is determined by the makeup of the county and not the precinct, thus we expect the makeup of the parish is more important in terms of explaining behavior. This baseline expectation leads to the question of what intervening effect do we expect to see at different levels of segregation? While increased levels of segregation might exacerbate perceptions of threat among whites, and therefore result in higher turnout, it is not clear that perceptions of threat would motivate African American behavior. We run into a similar problem when it comes to contact as scholars have generally found that increased levels of interracial contact do not significantly alter the attitudes of members of ethnic minority groups in the way we see interracial contact reducing the ethnic majority’s propensity to mobilize (Barlow et al 2013). Therefore, we expect precinct level variables will be less relevant to understanding variations in black turnout compared to whites.
Given these contrary findings, we contend that high rates of racially based residential segregation (both on the precinct and parish levels) are associated with lower levels of African American turnout. This expectation stems from Massey and Denton’s (1993) conclusion that racially based segregation presents numerous obstacles for racial minority groups. For example, high levels of segregation can reflect corresponding levels of social divisions. In the American South, where racial polarization and domination by whites remains the political norm, this implies that public goods, such as access to polling places and transportation, tend to be steered away from predominately African American areas (Trounstine 2016; Enos and Gideon 2016). We predict that high levels segregation produce a negative impact on African American turnout across geographic levels.

We outline our expectations for white and black turnout in Table 1. We expect that variations in African American political behavior remain driven by parish level factors, namely the size of the African American population and segregation. We expect a combination of precinct level (racial composition and segregation) and parish level (racial composition) factors can influence variations in white turnout.

(Table 1 Here)

2. Data and Measurement

We evaluate whether the distribution of groups influences white and African American political behavior by using data from three statewide elections in Louisiana: the 2000, 2004, and 2008 presidential elections. By using data from statewide presidential elections, we ensure that voters are presented with the same choice of candidates at the top of the ballot. This helps to ensure that our cross-precinct and cross-parish comparisons are valid. Additionally, examining presidential elections helps to eliminate differences in candidate quality, resources, and all of the other factors that typically distinguish candidates in lower-level elections.

We combine this electoral data with demographic data from the 2000 and 2010 Censuses (State of Louisiana 2011a; 2011b; 2011c; 2011d; U.S. Census 2000; 2010a). We chose to test our hypotheses in

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1 It is important to note that Hurricane Katrina and its aftermath caused a significant shift of the population within the state. We account for this by utilizing the 2000 Census data when analyzing the
Louisiana for several reasons. One of the most important reasons is that Louisiana has a very large African American population. According to the 2010 Census, African Americans composed 32.4 percent of the state’s population in comparison to 13.2 percent for the rest of the United States, the second largest share of any state population (Mississippi is the largest at 37.4 percent). In addition, examining patterns of African American turnout at the district level is much easier in Louisiana. Prior to the Supreme Court’s decision in *Shelby County v. Holder* (2013), Louisiana was forced to report turnout rates by race at the precinct level. Consequently, we can observe turnout by race directly as opposed to being forced to either derive estimates from survey data or relying on county level reports.

2.1 Measurement of Turnout by Race

Given the state of Louisiana provides the number of registered voters and voters by race on the precinct level, measuring turnout by race is a straightforward endeavor (Louisiana Secretary of State 2015). We calculate our dependent variable, turnout by race on the precinct level, as the following:

\[ T_{ij} = \frac{V_{ij}}{R_{ij}} \]

2.2 Measurement of Racial Context

Our analysis builds upon a foundation of precinct level voting data and block level (neighborhood) Census data. Separately, neither of these variables constitutes a complete picture of an individual’s racial environment. Even in Louisiana, which keeps a record on the race of all voters, precinct level data does not account for the racial makeup of the district. We therefore need to aggregate smaller census blocks 2000 and 2004 elections and the 2010 Census data for analyzing the 2008 election. The reason we made this choice is that the 2010 Census was conducted after Katrina and should account for the significant movement of peoples that occurred following Katrina in 2005.

2 Where \( V \) is total voting, \( R \) is total registered voters, \( i \) are the racial groups, and \( j \) are precincts. It is important that we note two points. First, when calculating African American turnout, we drop all precincts that do not contain any African American voters from our analysis (we perform the opposite procedure in our analysis of white turnout). Including these observations would create an artificial relationship between African American turnout and the white proportion of the precinct (i.e. all white precincts would be constrained to have zero African American turnout). Second, we drop all of the precincts where African American turnout is 100 percent and the number of African Americans in the precinct is less than five.
into the encompassing political district in order to ascertain the racial context of these political units. Yet, only accounting for the racial composition of each individual’s precinct tells a small part of the story. To create a more all-encompassing measure of an individual’s racial environment, we utilize GIS software to measure the racial composition of all the precincts adjacent to an individual’s home precinct (ESRI 2011). We compute the mean racial composition (weighted by population) of adjacent precincts in order to provide a more complete picture.\(^3\) Including the adjacent precinct’s racial composition helps to account for the possibility that an individual’s racial environment is more complex than what precinct and parish composition alone can account for\(^4\)

\[
B_i = \frac{\sum w_i(x_{ij})}{n_{ij}} e
\]

Constructing estimates of the mean racial composition remains an important, but intermediate, step. The next issue is to develop a measure on how racial groups (whites and African Americans) are distributed within these geographical units. As discussed in the previous section, we predict that the level of segregation maintains a critical influence on African American turnout. Given precincts, neighborhoods, and parishes can run the gamut from a high level of integration to complete segregation, knowing just the mean composition of a geographic unit omits critical information.

To account for this condition, we include separate measures of segregation at the precinct and parish levels. In order to capture the level of segregation within a precinct, we calculate the population variance of the racial composition within the constituent census blocks. The more a precinct’s constituent blocks differ from one another in terms of racial composition, the higher the variance, which implies a higher level of segregation. For instance, if a voting district is composed of two blocks of equal population, both of which are half black and half white, the variance will be zero. Alternatively, a voting district

\(^3\) Where \( i \) is a precinct, \( j \) is a neighborhood of adjacent precincts, \( x \) is the proportion of whites in a precinct, \( w \) is the proportion of a neighborhood of adjacent precincts’ population residing in a particular precinct, and \( n \) is the number of precincts in a group of adjacent precincts

\(^4\) There are numerous ways we could operationalize the racial composition of the area surrounding the precinct. We chose the average composition of the surrounding precincts due to the ease of computation.
district composed of two blocks of equal population, one 10% white and another 90% white, the variance would be .16, which we would consider to be a highly segregated voting precinct. This measure captures racial segregation at the neighborhood level (the smallest available) and aggregates it up to the voting precinct. The formula used to construct our measure is depicted below:

$$\text{Variance} = \frac{1}{n} \sum_{i=1}^{n} w_i(x_i - \bar{x})^2$$

To calculate segregation on the parish level, we utilize the more familiar D-statistic (also known as the dissimilarity index), which is one of the most frequently employed measures of segregation (Massey and Denton 1993). The equation used to calculate the D-Statistic is depicted below:

$$D = \frac{1}{2} \sum_{i=1}^{n} \frac{|b_i - w_i|}{B - W}$$

The interpretation of D statistic is that the number, which ranges from 0 to 1, reflects the proportion of group members within a geographic unit that would have to move in order to achieve an even balance of group members across all of the geographic unit’s constituent subunits. The reason why we employ our variance measure on the precinct level and the more familiar D-statistic on the parish level relates to the best way to handle homogenous precincts. Put another way, should we view precincts that contain only one or two individuals of the opposite race as highly internally segregated? The D-statistic would suggest these precincts are highly segregated while the variance measure would suggest the precincts are not segregated at all. We feel our variance measure is the best option here since the precinct itself is not internally segregated. However, the presence of racially homogenous (or nearly so) precincts is often a potential sign of a high degree of segregation at the parish level. If this is the case, we will capture this segregation on the parish level using the more commonly used D-statistic. The combination

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5 Where $B$ represents the total number of African Americans in the parish; $b_i$ represents the number of African Americans in all of the constituent census blocks; $W$ represents the total number of whites in the parish; and $w_i$ represents the white population in the constituent census blocks.
of these two measures allows us to estimate segregation on both the precinct and parish levels without effectively ‘double counting’ segregation.⁶

The strength of this approach is that it allows us to distinguish segregated from integrated geographic units in a straightforward way. Incorporating these measures of segregation into our empirical approach represents an important step in analyzing how political behaviors are affected by the spatial proximity of members of out-groups.

2.3 Control Variables

We include a number of control variables that have been shown to have a systematic effect on turnout. Numerous analyses (e.g. Wolfinger and Rosenstone 1980) have demonstrated the positive relationship between income, education, age, and the propensity to vote. Therefore, we include controls for African Americans and whites’ median level of income and the percent with at least some college education at the precinct level (Census 2010b). In addition, we include controls for the median age in the district, as older voters are generally more likely to turnout in comparison to younger voters. We also include a control for a precinct’s latitude, with the goal of controlling for the potential effects of Cajun culture and Catholicism, which are concentrated in the Southern portion of the state (Voss 1996). Finally, we control for parishes within New Orleans, as turnout has been systematically lower in these parishes compared to other areas of the state.

3. Statistical Models and Results

The first thing that we must take into consideration when choosing a modeling strategy is the hierarchical nature of the data—precincts nested within parishes. Analyzing nested data with a standard OLS model can lead to underestimation in the standard errors and a higher likelihood of inappropriate rejecting the null hypothesis (committing a type I error).⁷

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⁶ See Figure A1 in the supplemental appendix for a comparison of the distributions of these two variables.
⁷ The interested reader can find descriptive statistics for all of these variables in Table A2 in the supplemental appendix.
We utilize a series of hierarchical linear models to test our hypotheses in order to account for the nested nature of the data and to avoid some of the pitfalls that occur when analyzing multilevel data with inappropriate models. The main advantage of these models is their ability to partition the variance of the dependent variable by level—our model partitions the variance in-between the precinct and parish. An examination of the 2008 data reveals that 73.5 percent of the variance is due to differences across precincts, while the remaining 26.5 percent of the variance is accounted for by differences between parishes. We utilize random intercepts—in addition to the parish level variables—to account for between parish variations in the mean level of turnout. We present our findings in two different tables. The first table (Table 2) includes variables for precinct and parish level racial diversity and segregation while the second table (Table 3) also includes a pair of interaction terms between racial diversity and segregation at both the precinct and parish levels. These interaction terms allow us to assess whether there is a possibility that greater levels of segregation condition the influence of racial diversity on turnout.

3.1 Results

(Table 2 Here)

Table 2 demonstrates that the spatial distribution of racial groups influences white and African American turnout in different ways. We find that both the white proportion and segregation levels of the precinct are positive and significant predictors of white turnout in models 1-3. At the precinct level, white turnout increases as a function of the size of the African American population and increased levels of segregation. This finding is consistent across the timespan. Parish-level variables also exert a significant effect. White turnout is highest in parishes with large African American populations (as reflected by the negative coefficient on parish percent white), while white turnout decreases as the level of segregation increases (though this relationship is weaker).

For African Americans, the relationship is more straightforward. African Americans are less likely to turnout as the white proportion of the parish and parish-level segregation increases. Aside from

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8 70.5 percent of the variance is due to differences between precincts in 2004 and 67.5 percent of the variance is due to between precincts differences in 2000.
2004, we do not observe a significant relationship between the increased presence of out-group members and African American turnout at the precinct level. African American turnout decreases as a function of both parish and precinct level segregation. Models 4-6 suggest that variation in African American turnout is strongly conditioned by the racial composition of the parish and only weakly affected by the racial composition of the precinct.

So, what is the substantive impact of these independent variables on turnout? Holding all the other variables at their means and medians, white voter turnout is expected to decrease an average of almost 10 percentage points in precincts with low levels of segregation and a high population of African Americans (80 percent) compared to a similar precinct with high levels of segregation. This finding is in line with our expectations. Moving on to the parish level, we find further evidence that the mechanism between the racial environment and turnout is reversed. White turnout increases by approximately 6 percent, on average, as the African American proportion of the parish population increases from 50 percent to 80 percent across all levels of segregation. This finding is consistent with our prediction that threat is a motivator of white turnout. On the other hand, precinct level racial diversity does not have a significant effect on African American turnout. Variations in black turnout are more strongly conditioned by parish level variables. African American turnout increases by approximately 5 percent as the African American percentage of the parish population increases from 50 to 80 percent.

(Table 3 Approximately Here)

We have established that both racial diversity and segregation have an effect on voting behavior. The question now centers on whether the effect of racial diversity is conditional upon segregation. Taken alone, these findings demonstrate that racially based residential segregation dampens African American turnout. Yet, precinct-level segregation is associated with increased levels of white turnout while parish level segregation is associated with lower levels of white turnout. The next step to assess whether segregation matters more (or less) in racially diverse contexts and whether this potential conditional relationship applies to both African Americans and whites.
We evaluate this claim in Table 3. These models include all of the variables from the models in Table 2 with the addition of two interaction terms—the precinct percent white interacted with precinct level segregation and parish percent white with parish-level segregation. The inclusion of these interaction terms allows us to assess whether the effect of racial diversity is conditional upon segregation levels.

(Figure 1 Approximately Here)

The results of models in Table 3 reveal that the effect of precinct level racial diversity on white turnout is conditional upon segregation. Figures 1 and 2 display the marginal effects. Whites in racially integrated precincts are more likely to vote than whites in segregated precincts as the white proportion of the precinct increases. Stated differently, whites become less likely to vote as the size of the African American population in the precinct increases only when the precinct is integrated. Whites in heavily segregated precincts are equally likely to turnout regardless of the racial composition. The interaction between parish level racial diversity and segregation produces less consistent, though still interesting, findings. Whites generally become less likely to vote as the white proportion of the parish population increases. The interactive term reveals that parish level segregation mitigates the turnout dampening effect of increases in the white proportion of the parish population. Whites vote like there is a large African American population if the parish is highly segregation—even if the actual size of the African American population is quite small. We should also note that this finding fails to extend to 2004 or 2008, where the interaction is not significant.

(Figure 2 Approximately Here)

These conditional relationships fail to extend to African Americans, where these same two interaction terms are statistically and substantively insignificant. These findings work to confirm that segregation (and likely subsequent interracial contact) plays a significant role in explaining variations in white turnout but is much less important to understanding variations in African American turnout.

4. Discussion and Conclusions

We have demonstrated that variations in African American and white turnout are driven by different
factors. Consistent with the threat hypothesis, whites tend to turnout at the highest rate in parishes with the largest number of African Americans. However, it is important to note that whites in diverse precincts are less likely to turnout, so long as segregation levels are also low. This finding is consistent with the contact hypothesis. Variations in African American turnout are driven largely driven by parish-level variables while precinct-level factors matter less. These divergent findings speak to the likelihood that different mechanisms are at work, as the possibility of interracial contact shapes white behavior but not African American. This is possibly due to the fact that African American turnout is not driven by a reaction to whites but by the possibility that African Americans might substantively influence the political process.

Even though we contend the findings presented in this analysis are generally consistent and substantively consequential, it is important to recognize their limitations. We have analyzed voting patterns across multiple presidential elections within a single state. This case-study design limits the empirical breadth of our argument, particularly because Louisiana is a state in the Deep South with an atypically large African American population. We chose Louisiana in part because the state records turnout by race. There are clear tradeoffs associated with this choice, but, in this particular context, we contend the level of nuance is worth the potential loss of generalizability. Louisiana is a state in the Deep South with a large African American population and a racial legacy that includes slavery and Jim Crow. It is certainly possible that the relationships found here do not extend to different contexts. However, one fact that might speak to the analysis’s external validity is that the findings here are broadly in line with those of Enos’ (2016), who analyzed how racial diversity and segregation affected the voting behavior of whites in Chicago. Two markedly different contexts produced similar findings.

Another potential limitation is our reliance on precinct, opposed to individual-level, data. On the one hand, utilizing precinct level data has a number of advantages, from accurate vote tallies by race (which eliminates the possibility of committing an ecological fallacy) to detailed demographic data. As pointed out by previous scholarship, however, precinct level data is not a perfect substitute for individual-level data. We uncovered turnout patterns that are consistent with our hypothesized underlying individual-
level mechanisms. It would be beneficial for future analyses to test how racial diversity and segregation shape individual-level decision-making in the contexts specific to our analysis here.

We find that the racial environment of a geographic unit and the distribution of these groups affects white and African American turnout in very different ways. While our results support both the threat and contact hypotheses for white voter turnout, African American turnout remains largely influenced by in-group size at the parish level. Our findings provide a new wrinkle to the literature on political geography and how the distribution, in addition to the presence of racial groups influences turnout.
 References


Table 1: How the Racial Environment influences White and African American Turnout

<table>
<thead>
<tr>
<th>AA Population</th>
<th>Precinct</th>
<th>Parish</th>
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<tbody>
<tr>
<td></td>
<td>Low Seg.</td>
<td>High Seg.</td>
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<tr>
<td>White Turnout</td>
<td></td>
<td></td>
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<tr>
<td>Small</td>
<td>–</td>
<td>+</td>
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<tr>
<td>Large</td>
<td>–</td>
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<tr>
<td>AA Turnout</td>
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<tr>
<td>Small</td>
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<tr>
<td>Large</td>
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Table 2: HLM Models Regressing Precinct-Level Group Turnout on Racial Diversity and Segregation Levels

<table>
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<tr>
<th></th>
<th>Whites</th>
<th></th>
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<th>African Americans</th>
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<th></th>
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<tr>
<td>Precinct</td>
<td>0.172*** 0.183*** 0.228***</td>
<td>-0.022</td>
<td>-0.019*</td>
<td>0.004</td>
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<td>(0.008) (0.007) (-0.007)</td>
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<td></td>
<td>(0.012) (0.009) (0.009)</td>
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<tr>
<td>Prop. White</td>
<td>0.149*** 0.293*** 0.506***</td>
<td>-0.360*** -0.112*</td>
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<td>(0.043) (0.034) (-0.038)</td>
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<td>(0.064) (0.047) (0.049)</td>
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<td>Intra Precinct</td>
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<td>0.053**</td>
<td>0.018</td>
<td>-0.020</td>
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<tr>
<td>Segregation</td>
<td>0.012 (0.010) (-0.01)</td>
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<td></td>
<td></td>
<td>(0.018) (0.014) (0.013)</td>
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<tr>
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<td>0.001*** 0.001*** 0.0001</td>
<td>0.005*** 0.007*** 0.002***</td>
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<td>(0.004) (0.003) (-0.0002)</td>
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<td>0.008*** 0.001 0.004***</td>
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<td></td>
<td>(0.001) (0.001) (-0.001)</td>
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<td></td>
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<td>(0.001) (0.001) (0.001)</td>
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<tr>
<td>Median Age</td>
<td>0.152*** 0.165*** 0.207***</td>
<td>0.004</td>
<td>0.036</td>
<td>0.147***</td>
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<tr>
<td>% Some College</td>
<td>(0.022) (0.018) (-0.018)</td>
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<td>(0.028) (0.022) (0.021)</td>
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</tr>
<tr>
<td>Orleans Parish</td>
<td>-0.130*** -0.127*** -0.184***</td>
<td>-0.068</td>
<td>-0.081*</td>
<td>-0.222***</td>
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<td></td>
<td>(0.035) (0.036) (-0.044)</td>
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<td>-0.179*** -0.158*** -0.209***</td>
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<td></td>
<td>(0.042) (0.037) (-0.041)</td>
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<td>(0.048) (0.042) (0.039)</td>
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<td>D-Statistic</td>
<td>-0.092 -0.098* -0.188**</td>
<td>-0.048</td>
<td>-0.178*** -0.195***</td>
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<tr>
<td></td>
<td>(0.048) (0.042) (-0.057)</td>
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<td>(0.053) (0.047) (0.052)</td>
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<td>(0.155) (0.146) (-0.174)</td>
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<td>(0.178) (0.167) (0.165)</td>
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* p < 0.05, ** p < 0.01, *** p < 0.001; Standard errors in parentheses
Table 3: HLM Models Regressing Precinct-Level Group Turnout on Racial Diversity and Segregation Levels and their Interactions

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<td>0.778***</td>
<td>1.295***</td>
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<td>(0.111)</td>
<td>(0.099)</td>
<td>(0.094)</td>
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<td>Precinct Prop. White</td>
<td>-0.962***</td>
<td>-0.750***</td>
<td>-1.335***</td>
<td>-0.560**</td>
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<td>(0.159)</td>
<td>(0.143)</td>
<td>(0.146)</td>
<td>(0.210)</td>
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<td>Adjoining Precincts</td>
<td>-0.052***</td>
<td>-0.021*</td>
<td>-0.036***</td>
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<td>(0.012)</td>
<td>(0.010)</td>
<td>(0.011)</td>
<td>(0.016)</td>
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<td>Prop. White</td>
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<td>0.001***</td>
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<td>(0.0003)</td>
<td>(0.0002)</td>
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<td>-0.003</td>
<td>0.002</td>
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<td>(0.004)</td>
<td>(0.004)</td>
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<td>(0.005)</td>
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<tr>
<td>Median Group Age</td>
<td>0.008***</td>
<td>0.004***</td>
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<td>0.004***</td>
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<td>(0.001)</td>
<td>(0.001)</td>
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<td>(0.001)</td>
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<tr>
<td>% Some College</td>
<td>0.150***</td>
<td>0.163***</td>
<td>0.195***</td>
<td>-0.058*</td>
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<td>(0.020)</td>
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<td>(0.018)</td>
<td>(0.025)</td>
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<td>Orleans Parish</td>
<td>-0.101**</td>
<td>-0.113**</td>
<td>-0.188***</td>
<td>-0.088*</td>
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<td>(0.034)</td>
<td>(0.036)</td>
<td>(0.044)</td>
<td>(0.039)</td>
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<tr>
<td>Parish Prop. White</td>
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<td>-0.382*</td>
<td>-0.048</td>
<td>-0.028</td>
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<td>(0.228)</td>
<td>(0.241)</td>
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<td>-0.554**</td>
<td>-0.319</td>
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<td>(0.209)</td>
<td>(0.168)</td>
<td>(0.235)</td>
<td>(0.263)</td>
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<td>Parish Prop. White</td>
<td>0.686*</td>
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<td>(0.302)</td>
<td>(0.253)</td>
<td>(0.368)</td>
<td>(0.386)</td>
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<td>× D-Statistic</td>
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</table>

* p < 0.05, ** p < 0.01, *** p < 0.001; Standard errors in parentheses
Figure 1: Marginal Effect of Precinct Level Racial Heterogeneity on White Turnout Across Varying Levels of Within Precinct Segregation

These plots illustrate the impact that segregation and racial composition at the precinct level have on white turnout. The X-axis depicts the level of segregation found within a precinct while the Y-axis demonstrates whether the level of whites within a precinct produce a positive or negative effect on white turnout. Looking at precincts that have no intra-precinct segregation (0) across our time frame, we see that white voter turnout increases as the proportion of whites within the precinct increase as well. Put another way, white voter turnout decreases as the proportion of African Americans increase within highly-integrated precincts. The strength of this relationship decreases, however, as the level of segregation increases. Racial diversity no longer has a significant mitigating impact on white voter turnout once segregation levels reach approximately .16 to .20.
Only the first model demonstrates a statistically and substantively significant influence for the interactive terms. Both the 2000 and 2004 models demonstrate a negative significance until parishes become relatively segregated (at roughly .75 and .8, respectively), which implies a moderating effect for segregation. Any interpretation or analysis of the last two models, however, should be tempered given their insignificant magnitude.