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Race and Turnout: Does Descriptive Representation in State Legislatures Increase Minority Voting?

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Abstract

The 2008 election marked an end to the longstanding gap in the level of black and white voter turnout, offering further evidence that minority empowerment affects voter turnout. In this article, the authors move beyond a dyadic conceptualization of empowerment and argue that the level of descriptive representation within the legislative body as a whole is crucial to understanding how context affects voter turnout. They find African Americans and Latinos are more likely to vote when residing in states with increased descriptive representation in the state legislature measured by the percentage of black or Latino lawmakers.

Keywords

race, empowerment, voting, turnout

The 2008 presidential election was historic in part because of the election America's first African American president. The 2008 election also witnessed a significant increase in minority participation and marked an end to the longstanding gap in the level of black and white voter turnout. Black voter turnout increased from 60 percent in 2004 to 65 percent in 2008. Latino turnout rose from 47 percent to 50 percent. White non-Hispanic turnout was 67 percent in 2004 and 66 percent in 2008. The black–white gap went from 7 percent in 2004 to 1 percent in 2008 (Lopez and Taylor 2009). Was increased minority turnout an anomaly because of something about the Obama campaign, or was it indicative of a more general relationship between the election of minorities to public office and voter turnout?

We draw on the rich subnational variation across the fifty states to test whether minorities residing within political jurisdictions where they are descriptively represented are more likely to vote. We conclude by comparing the average increase in minority turnout from subnational descriptive representation over the past decade to minority turnout nationally in 2008, informing our understanding of race and turnout in the 2008 presidential elections.

Minority Empowerment, Collective Representation, and Turnout

In recent years, scholars have paid increased attention to the consequences of minority representation in elected offices. The bulk of work conducted on how political behavior is affected by political empowerment has centered on African Americans and dyadic representation in Congress (Bobo and Gilliam 1990; Gay 2001; Kousser 1999; Tate 1993, 2001, 2003). These studies provide mixed evidence for the contention that African Americans who enjoy (dyadic) descriptive representation in legislative bodies are more likely to participate in elections (Bobo and Gilliam 1990; Gay 2001; Tate 2003; Griffin and Keane 2006; Griffin and Newman 2008; Banducci, Donovan, and Karp 2004, 2005; Swain 1993).

The logic behind the empowerment hypothesis suggests that descriptive representation is likely to increase voter turnout among racial/ethnic minorities by making it easier for minorities to gather information about elections and increasing expectations about minority influence in government (Segura and Bowler 2005). Most empirical research has tended to support the contention that empowerment affects civic engagement by making participation easier. For example, Leighley (2001) finds that empowerment (descriptive representation) among African Americans increases levels of mobilization, although the

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same is not true for Latinos. Residence in majority–minority congressional districts, which is closely linked to descriptive representation, has been shown to increase the political knowledge, efficacy, and interest of African Americans (Banducci, Donovan, and Karp 2004) as well as Latino turnout (Barreto, Segura, and Woods 2004). Pantoja and Segura (2003) find the presence of Latino representatives in the state assembly, state senate, and/or U.S. House is associated with lower levels of political alienation among Latino constituents, even if the effect is somewhat modest.

However, studies that have examined this relationship thus far (e.g., Bobo and Gilliam 1990; Gay 2001; Griffin and Keane 2006) are limited by their dyadic conceptualization of representation. The empowerment literature focuses largely on representation in local government or on the constituent–legislator relationship within majority–minority congressional districts. Few scholars have empirically studied the effects of state-level representation on turnout rates for racial and ethnic minorities (for exceptions, see Barreto, Segura, and Woods 2004; Pantoja and Segura 2003). *Collective* representation in state legislatures has been almost completely overlooked.

We argue that minority representation within a legislature produces effects beyond district-level representation that may increase participation rates for African Americans and Latinos. This occurs because collective representation is necessary for translating descriptive representation into substantive policy outcomes (see Griffin and Newman 2008), while dyadic representation is not. While having a same-race representative may increase rates of mobilization and provide psychological benefits (Barreto 2007; Bobo and Gilliam 1990; Gay 2001), this kind of dyadic representation is unlikely to result in significant changes to public policy unless it is coupled with substantial minority representation within the chamber as a whole.

In other words, descriptive representation in a dyadic sense—residing in a district with a minority elected official—may or may not be coupled with significant descriptive representation within the legislature as a whole. Yet collective representation is what scholars have linked to shifts in policy within the United States. This is especially true when examining the states, where studies have consistently linked the overall percentage of minorities within the legislature to levels of substantive representation for Latinos (Preuhs 2006, 2007) and African Americans (Haynie 2001; Owens 2005). Increased black representation in government promotes policy outcomes beneficial to minority groups in areas such as civil service employment (Eisinger 1982), welfare (Bratton and Haynie 1999; Fording 2003; Owens 2005), and criminal sentencing policy (Welch, Combs, and Gruhl 1990). If there is a link between the overall, or collective, level of descriptive representation in state legislatures and substantive policy outcomes for racial and ethnic groups, we might expect a link between collective descriptive representation and voter mobilization. To date, however, no study has examined this possibility.

Studies of local governments, such as school boards and city councils, have also found that an increase in the descriptive representation of minorities does tend to result in the enactment of policies which favor minorities, although the impact of minority mayors is more uncertain (Kerr and Mladenka 1994; Leal, Martinez-Ebers, and Meier 2004; Marschall 2005; Meier et al. 2005; Mladenka 1989a, 1989b). Outside of subnational government, however, evidence is mixed regarding the notion that there is a direct translation of descriptive representation into substantive outcomes. There is considerable disagreement regarding the contention that the substantive representation of minorities is best achieved by the creation of minority–majority districts and the election of minorities to Congress (Cameron, Epstein, and O'Halloran 1996; Griffin and Newman 2008; Lublin 1997; Swain 1993; Hero and Tolbert 1995). The disconnect between collective levels of descriptive representation at the federal level and positive substantive outcomes weakens the causal mechanism through which we expect collective descriptive representation to affect turnout. For reasons we detail in the next section, there is good reason to believe that the election of minorities to subnational legislatures does not produce the same trade-off between descriptive and substantive representation that occurs at the federal level because of majority–minority districts. While beyond the scope of this article, future researchers may wish to extend our argument to the local level.

Collective Descriptive Representation in Legislatures and Turnout

Research on racial/ethnic politics in the states provides some support for the argument that minority representation at the state level may be linked to voter turnout. Statewide levels of racial/ethnic diversity are a significant predictor of policy outcomes and rates of participation for minority group members. African Americans do relatively better in terms of policy outcomes (defined as graduation ratios, incarceration ratios, and suspension ratios) in states with higher racial diversity (Hero 1998; Hero and Tolbert 1996). Hero (2003, 2007) also finds that black–white voter registration ratios and black–white turnout ratios are higher in states with greater racial and ethnic diversity.

But a limitation of this literature is the exclusive use of aggregate state data, which does not allow us to understand how state-level contextual factors interact with or affect individual decisions to vote. Nor does this research test the effect of representation in state government on minority participation. We know that overall turnout rates are lower in states with increased racial and ethnic

diversity because of registration barriers (Hill and Leighley 1999). But are whites demobilized in diverse states, or do racial and ethnic minorities have lower turnout? It is possible that minorities are mobilized while whites are demobilized, a pattern that would result in lower aggregate turnout (see Gay 2001).

Descriptive representation in state legislatures and large in-group population size may promote participation among minorities, and the two conditions tend to go together. Larger minority populations establish the potential for playing a role in the political system; however, a high level of statewide descriptive representation provides the actual *mechanism* for changing substantive policy in a way that benefits minority populations. In other words, minority group size is a necessary but not sufficient condition for linking context to turnout. Empowerment is unlikely to occur in areas of low minority group size. However, high group size, when combined with low levels of empowerment (as was the case for much of the twentieth century) is not expected to produce changes in the attitudes of blacks that are linked to greater turnout. We argue empowerment or descriptive representation in legislatures is a necessary and sufficient condition to increase minority political participation.

In short, empowerment increases voter turnout among minorities by increasing feelings of trust and efficacy; the literature on minority representation would suggest that that is most likely to do so *when conditions within the legislature are favorable for the translation of descriptive representation into substantive outcomes* (e.g., when there is a larger minority delegation within the legislature as a whole). A black legislative caucus or Latino caucus, common in legislatures with larger minority delegations, is one potential avenue for the translation of descriptive representation into substantive policy (King-Meadows and Schaller 2006; Orey, Overby and Larimer 2007). Larger minority delegations also increase the possibility of holding positions of seniority or institutional influence, which is key to maximizing the policy benefits associated with descriptive representation (Preuhs 2006). Collective representation may also increase minority turnout through large-scale statewide mobilization campaigns or other activities that facilitate participation.

Studies of black participation acknowledge the presence of a "policy-motivated" approach for black participation. Platt (2008) argues that blacks are more likely to participate when they have greater access to policy makers generally. The overall level of black representation in electoral institutions is likewise linked to lower rates of protest by blacks, who are more likely to favor conventional forms of participation under such circumstances (Jenkins, Jacobs, and Agnone 2003). These studies parallel works in urban politics, which note that the attitudinal benefits of black incorporation occur only when descriptive representation is coupled with substantive policy changes (Marchall and Ruhil 2007; Marchall and Shah 2007).

Last, we argue for the need to account for statewide or collective representation because of the symbolic importance attached to collective representation. Put simply, Weissberg (1978, 547) writes that "it is unlikely that one's 'best' representation will come from the individual one votes for (or against)." Beyond dyadic representation, collective representation may be important for minority participation. Substantive policy benefits, symbolic representation, and increased mobilization efforts may drive higher minority turnout rates in these state contexts.

Data Limitations

Much of the existing research on race and turnout has been constrained by data and modeling limitations. Academic surveys that have rich attitudinal measures (e.g., the American National Election Study, Black National Election Study) are ill suited for modeling the effects of state electoral context, as such surveys are not designed to capture representative samples in each state. It is also difficult to obtain sufficient sample sizes of racial and ethnic minorities using standard national surveys. The Black National Election Study was last conducted in 1996. Although a new Latino National Survey was recently completed in 2007, it does not coincide with a national election (see Fraga et al. 2006, forthcoming). Aggregate data are well suited for measuring state-level contexts but ill suited for identifying which individual voters are affected by state voting laws or contextual factors. Previous research does not adequately account for interactive effects of state-level phenomena, such as racial context or descriptive representation, on individual voting decisions. Rarely have studies modeled the effects of state contextual factors on individual-level turnout of minority groups, and even rarer are multiethnic tests examining the political behavior of African Americans and Latinos in one study (for an exception, see Leighley 2001).

Large-Sample Survey Data

We avoid some of the modeling problems inherent in this type of research by merging individual-level data from the U.S. Census Bureau's Current Population Survey (CPS) Voting and Election Supplement and the Cooperative Congressional Election Studies (CCES) with detailed measures of each state's descriptive representation. These very large national random sample surveys include accurate estimates of the population as a whole. Compared to standard surveys, our national data include large and representative samples of African Americans and Latinos. Of the over 83,000 total sample of eligible voters in the 1996

CPS, over 9 percent reported being African American and 5 percent reported being of Hispanic origin.[1] The 2006 CCES and 2008 CCES include 36,000 and 32,800 respondents, respectively. The CPS and CCES provide a way to obtain large samples of minority populations over time.

In addition, the CPS contains random samples from each of the fifty states, with state samples ranging from a low of almost one thousand respondents to a high of six thousand respondents, necessary for testing state contextual factors.[2] We employ multilevel modeling (MLM) to test the impact of state context on individual voter turnout decisions using the 1996, 1998, 2002 and 2006 CPS. The baseline 1996 survey was chosen for comparability to the 1996 Black National Election Study, on which much of the previous literature on descriptive representation is based (Tate 1993). The other midterm election years were chosen to test this hypothesis over time and in a midterm election when state contextual factors should matter more in increasing turnout considering the absence of a presidential election. This data set allows for a rigorous empirical test of the argument that descriptive representation in state legislatures partially determines turnout for racial and ethnic minority groups. As we discuss in greater detail below, the CPS data are the best available for studying voting given low overreporting of turnout. A limitation of the CPS is that it does not provide sufficient zip code or county identifiers in which to match respondents geographically to congressional districts. As a follow-up, we estimate models using the 2006 and 2008 CCES data.[3] These data include large samples of black and Latino respondents sufficient for this analysis but also identify a respondent's congressional district.

We filtered out respondents who were ineligible to vote (noncitizens and those younger than eighteen years of age) from the CPS and CCES samples to model whether a respondent reported voting. Use of CPS data limits overreporting of turnout in survey data, as the reported turnout is only 5 percent over actual voter eligible population turnout (McDonald and Popkin 2001).[4] These comparisons aid in validation of our dependent variable. Vote-validated turnout data are used for the 2006 CCES analysis, also providing confidence in the accuracy of our findings. Vote-validated turnout data are not available for the 2008 CCES, but reported turnout in the sample was 71 percent, marginally higher than actual turnout of eligible voters in the election.

Modeling Multilevel Data

Our research question concerns a relationship between contextual forces and individuals residing within states. The term *multilevel* refers to a hierarchical or nested data structure; in our two-level study, individuals are nested (or reside) within states. The lowest level (level 1) is formed by individuals, while the highest level of aggregation (level 2) is the American states. Multilevel models are needed because the assumption of independence of all observations is violated when data are grouped by states; that is, observations from one state are generally more similar than the observations from another state (Primo, Jacobsmeier, and Milyo 2007). Multilevel models account for this while allowing us to model the interaction of key individual-level factors with state-level measures of representation (Bryk and Raudenbush 2002; Steenbergen and Jones 2002). We employ cross-level interactions, modeling the race of the respondent (individual level) with state contextual factors, especially descriptive representation in their state legislatures.

State (Level 2) Variables

Our primary explanatory variables measure descriptive representation in state legislatures with data on the percentage Latinos and African Americans in state legislatures over time (1996–2006) from the National Association of Latino Elected Officials (NALEO) and the Joint Center for Political and Economic Studies, respectively. NALEO has published a roster containing information on every Latino elected official in the United States since the 1980s. The Joint Center has collected similar data for African Americans since the 1970s. These rosters offer the best source of data on the number of minority officials at the subnational level over time.[5]

Because of data availability and very low representation in state legislatures for Asian Americans, we focus on representation of African Americans and Latinos. Cross-level interactions are used to model descriptive representation in state legislatures for minority turnout decisions (*African American respondent* × *percentage black in state legislature* and *Latino respondent* × *percentage Latino in state legislatures*). Barriers to voting are modeled with state institutional rules regulating voting, specifically the number of days prior to the election needed to register to vote (traditional closing date). Values range from zero in seven states to thirty days before the election. We predict respondents residing in states with more restrictive closing dates with have a lower probability of voting. To measure state socioeconomic contexts, we measure the percentage of high school graduates with data from the U.S. Census Bureau (various years) in each respondent's state (see Oliver and Mendelberg 2000). We also measure the competitiveness of elections in the respondent's state assuming respondents in states with active political campaigns will be more likely to vote. These include the competitiveness of the presidential election, senatorial races, and

gubernatorial races in a respondent's state as well as the number of ballot initiatives appearing on the state's ballot.[6] Higher values for the margin of victory variables indicate a more competitive election.[7] Residence in a state with more competitive elections and more ballot initiatives should increase the probability of voting (Cox and Munger 1989; Smith and Tolbert 2004)

Individual (Level 1) Variables

At the individual level many factors have been found to be important predictors of voting.[8] Our models also include standard demographic controls given known participation gaps based on gender, race, age, income, and education.[9] We expect that higher-educated, wealthier, older individuals are more likely to vote than those who are younger with lower education and income. An advantage of the CPS data beyond standard surveys is detailed employment information.[10] We expect those with higher-status occupations to have an increased probability of voting. Government workers have been found to have an increased probability of voting. The concept is measured with a variable for whether the respondent is a government employee (federal, state, local) coded 1, with all others coded 0. The models also control for military veteran (or currently in the military) and residential mobility, which are important predictors of voting.[11] Because marriage and children increase community ties (often with homeownership) we include binary variables for married respondents (coded 1, all others 0) and those with a child younger than the age of eighteen residing at home (coded 1, all others 0).[12] The residential community type is included in the models through dichotomous variables for suburban and urban residents.[13]

We use MLM to analyze the probability of voting. Multilevel models allow for parameter estimates to vary across aggregate units, allowing for valid estimates of contextual effects. Using this method we may derive more accurate statistical estimates than standard analyses restrained at one level of analysis. We allow the model intercepts to vary by state as well as coefficients for a respondent's race/ethnicity. Thus, our models include random (or varying) effects that allow for heterogeneity in the intercepts and the slopes for race and ethnicity across the states. Our multilevel models consist of an individual-level equation (level 1) and a state-level equation (level 2). The level 1 and level 2 equations are the following:

$$\text{Logit}\,(P_{Yij}) = \gamma_0 + \beta_{01}\,(\text{African American}) + \beta_{02}\,(\text{Latino}) + \beta_{03}\,(\text{Asian American}) + \beta_{04}\,(\text{Age}) + \beta_{05}\,(\text{Age Squared}) + \beta_{06}\,(\text{Income}) + \beta_{07}\,(\text{Education}) + \beta_{08}\,(\text{Male}) + \beta_{09}\,(\text{Married}) + \beta_{010}\,(\text{Children}) + \beta_{011}\,(\text{Government Worker}) + \beta_{012}\,(\text{Military Veteran}) + \beta_{013}\,(\text{Residential Mobility}) + \beta_{014}\,(\text{Urban Resident}) + \beta_{015}\,(\text{Suburban Resident}) + \beta_{016}\,(\text{Management}) + \beta_{017}\,(\text{Professional}) + \beta_{018}\,(\text{Service}) + \beta_{019}\,(\text{Sales}) + \beta_{020}\,(\text{Secretarial}) + \beta_{021}\,(\text{Farming}) + \beta_{022}\,(\text{Transportation}) + \beta_{023}\,(\text{African American} \times \text{Percentage Black State Legislature}) + \beta_{024}\,(\text{Latino} \times \text{Percentage Latino State Legislature}) + \beta_{025}\,(\text{Asian} \times \text{Percentage Asian Population}) + \varepsilon$$

and

$$\gamma_0 = \gamma_{00} + \beta_1\,(\text{Percentage Black Legislature}) + \beta_2\,(\text{Percentage Latino Legislature}) + \beta_3\,(\text{Percentage Asian Population}) + \beta_4\,(\text{Registration Closing Date}) + \beta_5\,(\text{Exposure Ballot Measures}) + \beta_6\,(\text{Percentage High School Graduates}) + \beta_7\,(\text{Competitive Presidential Race}) + \beta_8\,(\text{Competitive Senate Race}) + \beta_9\,(\text{Competitive Governors Race}) + \varepsilon.$$

CPS Results: Collective Minority Representation

Table 1 offers empirical tests of our argument that the turnout decisions of African Americans and Latinos partially result from collective descriptive representation in state legislatures in the 1996 presidential election (column 1), 1998 midterm election (column 2), 2002 midterm election (column 3), and 2006 midterm election (column 4) using the CPS survey data. These models include our key cross-level interactions of black respondents and the percentage black in state legislatures and Latino respondents multiplied by the percentage Latino in the respondent's state legislature.

Holding all other factors constant, we see in row 1 that African Americans residing in states with a higher percentage of black lawmakers in the state legislature *are* significantly more likely to vote than an identical African American residing in a state with less representation in the legislature. This finding holds over time (1996–2006) and election type (congressional and presidential). The importance of descriptive representation in legislatures is not limited to African Americans, as row 2 shows that Latinos residing in states with high levels of descriptive representation in the state legislature are significantly more likely to vote, ceteris paribus, in all four elections studied. In short, *subnational or collective descriptive representation appears to increase turnout for both Latinos and African Americans*.

The appendix reports a replication of Table 1 controlling for the percentage Democrat in the legislature. We control for Democratic legislatures to make sure our measures of Latino and black representation are not merely proxying more Democratic legislatures since most

Table 1. Probability of Voting for Blacks and Latinos and Statewide Descriptive Representation (Hierarchical Linear Modeling and Current Population Survey Data)

	1996		1998		2002		2006	
	b (*SE*)	$p < \|z\|$	*b* (*SE*)	$p < \|z\|$	*b* (*SE*)	$p < \|z\|$	*b* (*SE*)	$p < \|z\|$
Cross level interactions: Race × state context								
Black respondent × Percentage Black State Legislature	0.030 (0.006)	.000	0.053 (0.008)	.000	0.003 (0.007)	.000	0.040 (0.007)	.000
Latino Respondent × Percentage Latino State Legislature	0.018 (0.007)	.012	0.020 (0.005)	.001	0.008 (0.003)	.011	0.007 (0.004)	.086
Base terms								
Black respondent	–0.005 (0.088)	.952	–0.282 (0.108)	.013	–0.008 (0.081)	.921	–0.257 (0.101)	.015
Latino respondent	–0.254 (0.095)	.011	–0.326 (0.087)	.001	–0.251 (0.066)	.001	–0.215 (0.066)	.002
Asian respondent	–0.807 (0.101)	.000	–0.887 (0.120)	.000	–0.859 (0.092)	.000	–1.000 (0.093)	.000
Percentage black in state legislature	–0.001 (0.006)	.850	–0.014 (0.008)	.087	–0.003 (0.006)	.584	–0.007 (0.005)	.222
Percentage Latino in state legislature	–0.005 (0.003)	.083	–0.003 (0.006)	.547	0.001 (0.003)	.852	–0.004 (0.008)	.603
State context (level 2)								
President competitiveness	0.432 (0.387)	.271					–-	
Senator race competitiveness	0.207 (0.061)	.002	–0.014 (0.111)	.898	0.319 (0.068)	.000	0.100 (0.079)	.209
Governor race competitiveness	–0.014 (0.082)	.861	0.289 (0.097)	.005	0.116 (0.073)	.121	0.248 (0.099)	.017
Number of initiatives state ballot	0.017 (0.006)	.006	0.042 (0.009)	.000	0.048 (0.013)	.001	0.050 (0.012)	.000
Closing date to register to vote	–0.009 (0.003)	.006	–0.007 (0.004)	.106	–0.004 (0.004)	.231	–0.003 (0.003)	.374
Percentage high school graduates	0.007 (0.005)	.178	0.001 (0.009)	.926	0.019 (0.010)	.073	0.020 (0.013)	.140
Level 2 intercept	–5.245 (0.555)	.000	–5.326 (0.743)	.000	–6.878 (0.909)	.000	–6.818 (1.129)	.000
Individual-level controls (level 1)								
Education	0.224 (0.007)	.000	0.186 (0.006)	.000	0.212 (0.006)	.000	0.206 (0.006)	.000
Income	0.064 (0.004)	.000	0.051 (0.004)	.000	0.055 (0.003)	.000	0.046 (0.003)	.000
Age	0.043 (0.004)	.000	0.068 (0.004)	.000	0.043 (0.004)	.000	0.042 (0.003)	.000
Age squared	0.0001 (0.00004)	.004	0.0003 (0.00004)	.000	0.00004 (0.00004)	.308	0.0001 (0.0001)	.022
Male	–0.132 (0.020)	.000	–0.053 (0.020)	.008	–0.047 (0.018)	.009	–0.058 (0.016)	.001
Married	0.315 (0.031)	.000	0.312 (0.030)	.000	0.403 (0.020)	.000	0.325 (0.025)	.000
Urban	0.086 (0.044)	.049	0.009 (0.046)	.849	0.070 (0.052)	.178	–0.021 (0.040)	.598

(continued)

Table 1. (continued)

	1996		1998		2002		2006	
	b (*SE*)	$p < \|z\|$	*b* (*SE*)	$p < \|z\|$	*b* (*SE*)	$p < \|z\|$	*b* (*SE*)	$p < \|z\|$
Suburban	–0.045	.131	–0.109	.022	–0.103	.005	–0.070	.025
	(0.030)		(0.047)		(0.036)		(0.031)	
Residential mobility (5 years at residence or more)	0.531	.000	0.657	.000	0.587	.000	0.794	.000
	(0.028)		(0.020)		(0.025)		(0.029)	
Military veteran	0.093	.001	0.027	.334	0.079	.001	0.126	.000
	(0.028)		(0.028)		(0.022)		(0.028)	
Government employee	0.451	.000	0.078	.000	0.454	.000	0.452	.000
	(0.035)		(0.020)		(0.036)		(0.029)	
Occupation								
Management	0.234	.000	0.164	.000	0.252	.000	0.223	.000
	(0.040)		(0.043)		(0.032)		(0.028)	
Professional	0.252	.000	0.232	.000	0.195	.000	0.254	.000
	(0.043)		(0.041)		(0.033)		(0.029)	
Technician	0.247	.001	0.143	.022				
	(0.069)		(0.062)					
Sales	0.200	.000	0.035	.378	0.192	.000	0.176	.000
	(0.033)		(0.040)		(0.041)		(0.032)	
Secretarial	0.278	.000	0.292	.000	0.173	.000	0.227	.000
	(0.035)		(0.044)		(0.035)		(0.033)	
Protection services	0.161	.070	0.562	.000				
	(0.089)		(0.075)					
Service	–0.026	.390	–0.076	.065	–0.071	.018	0.073	.012
	(0.031)		(0.041)		(0.030)		(0.029)	
Transportation	–0.191	.001	–0.167	.001	–0.054	.283	–0.130	.010
	(0.055)		(0.046)		(0.050)		(0.050)	
Laborers	–0.197	.003	–0.138	.049				
	(0.066)		(0.070)					
Farming	0.175	.020	0.250	.001	0.273	.000	0.079	.547
	(0.075)		(0.071)		(0.064)		(0.131)	
Random effects: Variance component								
Level 1 intercept (u^0)	.032		.082		.057		.058	
Black respondent (u^1)	.069		.103		.075		.053	
Latino respondent (u^2)	.088		.132		.046		.030	
Asian respondent (u^3)	.156		.546		.239		.183	
Log likelihood function	99318		95920		109372		105850	
Level 1 *N*	70,523		68,364		77,619		75,188	
Level 2 *N*	50		50		50		50	

The dependent variable is whether the respondent voted, coded as 1 if yes and 0 otherwise. Hierarchical linear models estimated using HLM 6.0. Random coefficient models using a Bernoulli distribution and logit link function. Population-average model with unstandardized logistic regression coefficients and robust standard errors in parentheses. Models were run to convergence, without centering around the mean.

minority state lawmakers are Democrats. We test whether the models measure descriptive representation or partisan representation, as Democrats are the party presumably providing the most substantive representation to minorities (Hero and Tolbert 1995). The key interaction terms—a Latino residing in a state with increased Latino representation in the legislature or a black respondent residing in a state with increased black representation in the legislature—remain statistically significant in all four election years. Even after controlling for the percentage Democrat in the legislature, higher minority representation leads to higher turnout for black and Latino citizens.

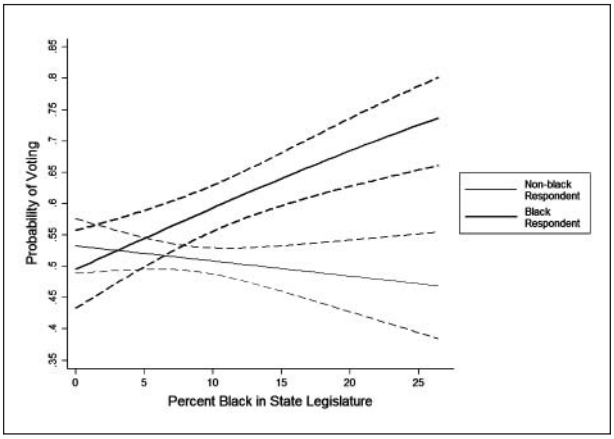

Figure 1. Probability of voting for a black respondent with percentage black in state legislature interaction, 1998
Bolded line = black respondent; nonbolded line = white respondent.

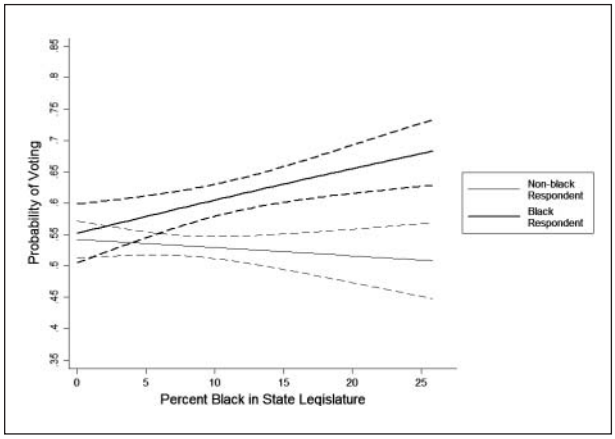

Figure 2. Probability of voting for a black respondent with percentage black in state legislature interaction, 2002
Bolded line = black respondent; nonbolded line = white respondent.

An appendix (available at http://prq.sagepub.com/supplemental/) replicates Table 1 controlling for the percentage black population in the state. Our primary results remain; controlling for the percentage black population in the state, an African American residing in a state with increased black representation in the legislature is more likely to vote over the four elections in our study. The coefficient for percentage black population is not significant, except for in one year, and the sign is negative, not positive. This means minority representation in the legislature has an independent effect on minority turnout rates from minority population size. We return to this below.

We translate our MLM estimates from Table 1 into simulations of the probability of voting (see Figures 1 and 2) to demonstrate how the effect of state-level representation on individual turnout varies by a respondent's race/ethnicity. These simulations are displayed as graphs that illustrate the probability of an individual voting at different levels of black or Latino representation in the state legislature, holding all other variables in the model constant at their mean or modal values. The figures show that increasing the percentage of blacks or Latinos in the legislature has a large positive effect on turnout of that racial group, but not on whites. For example, Figure 1 shows the probability of an African American voting in the 1998 midterm elections is 50 percent, all else equal, if the individual resides in a state with no descriptive representation. An identical individual residing in a state in which 25 percent of the legislature is African American is predicted to have a 72 percent probability of voting, a 22 percent difference.[14] The 95 percent confidence interval tell us the probability of a black voting is distinct from nonblacks when African Americans compose 8 percent of the legislature and above. In this midterm election, we see that the probability of an African American voting increases dramatically with representation in the legislature. The probability of a nonblack (whites, Asian Americans, Latinos) voting falls as African Americans control a greater number of seats in the legislature. Thus, the data from 1998 suggest that nonminorities may be demobilized by increased minority representation (see Gay 2001).

Figure 2 replicates the simulations for African Americans in the 2002 midterm election. A very similar pattern is shown with an increased probability of voting in states with more descriptive representation in the state legislature but no change for nonblacks (whites) or a slight decline. There is a 10 percentage point increased probability of voting for a black respondent when varying black representation in the legislature from minimum to maximum values (when blacks control 25 percent of the legislature). The base term for an African American respondent is negative and statistically significant in the midterm election. Since African Americans have been shown to have higher turnout than whites holding socioeconomic status constant (Leighley and Nagler 1992), this negative and statistically significant coefficient in 1998 indicates blacks residing in homogeneous states with very low statewide descriptive representation are demobilized. This finding is consistent with research showing substantive policy outcomes for African Americans may be worse in racially homogeneous states (Hero 1998). Graphs based on the 1996 and 2006 data are very similar to those shown in Figures 1 and 2 and are available online. Varying black representation from minimum to maximum values increases the probability of an African American voting by 15 percentage points in 1996.

We find a very similar pattern for Latinos (results available online). The probability of a Latino voting in the 1996 election increases by 10 percent points when comparing a Latino residing in state with no Latinos in the legislature to one residing in a state where Latinos compose 30 percent of the legislature. There is no change for non-Hispanics. These are larger turnout increases than what we saw nationally in the 2008 presidential elections with Obama as a candidate. In the 1998 midterm election, a Latino residing in a state with no Latinos in the legislature has only a 43 percent probability of voting, while a Latino from a state with maximum levels of descriptive representation has a 55 percent probability of voting, a 12 percent point difference, all else equal. Changes in the collective level of descriptive representation for Latinos within the state legislature not only increase the probability of voting for Latinos but also can change a marginal nonvoter (less than 50 percent probability of voting) into a voter (noting the shift above 50 percent in our last example). The analysis of the CPS data over time shows both African Americans and Latinos benefit from collective representation in the legislature, although the results are slightly less pronounced for Latinos. This may be because Latino turnout rates are considerably lower than those of African Americans.

Robustness Checks and Dropping Outlier States

The models reported in Table 1 are robust to changes in model specification, including dropping respondents living in states with very high (top 20 percent black or Latino populations) or very low minority populations (i.e., outlier effects). The analysis was also run to untangle the effects of minority population size from the effects of minority representation in state legislatures. To further clarify the relationship between collective descriptive representation and turnout, we generated figures similar to those presented earlier for subsamples of respondents from the bottom 50 percent of states in terms of minority representation in the legislature. These graphs show minority turnout does not increase substantially for those residing in states with very low minority representation; rather, the line predicting voting is flat. When these models are replicated with a subsample of respondents from the bottom 80 percent of states in terms of minority representation, the predicted probability of minority turnout increases with minority representation in the legislature. In 1996, for example, when deleting respondents from the states with the top 20 percent black population, we effectively removed respondents from eight Southern states (Mississippi, Alabama, Louisiana, South Carolina, Maryland, Georgia, North Carolina, Florida) with black populations ranging between 16 percent and 36 percent, plus two non-Southern states (Illinois and New York). Blacks residing in states with increased black representation in the legislature are more likely to vote, even when living outside of the South with traditionally high black populations. Similarly, Latinos residing in states with increased collective representation in the legislature are generally more likely to vote, even when living in states with modest Latino populations. The fact that the results remain when the models are estimated outside of Southern states suggests that minority representation in the legislature may be more important than population size. Our results, then, are not confined only to states with the largest minority populations: collective descriptive representation increases turnout for minorities even when minority populations are of a modest size.

An online appendix lists the top ten states in terms of the percentage black in the state legislature and percentage black in the population for 1996, 1998, 2002, and 2006. Some states (e.g., Alabama, Florida, New York, Ohio, and Illinois) overrepresent blacks in the legislature relative to their population size, while others underrepresent African Americans in the legislature. The findings we report here are also robust when using the natural log of percentage minority in the legislature to account for diminishing effects of increased representation and combining the percentage Latino and black representatives serving in the state legislature. Results from these additional model specifications are available in an online appendix.[15]

Results CCES: Dyadic and Collective Minority Representation

Table 2 replicates the CPS analysis using the CCES data to predict the probability of black and Latino turnout, relative to whites or non-Hispanics, respectively, in the 2006 midterm and 2008 presidential election. The advantage of these data is that we can identify whether the respondent resides in a majority–minority congressional district and include variables for whether the respondent is represented by a Latino or African American member of Congress (dyadic representation). Our primary explanatory variable is identical to the CPS analysis: an interaction term between respondents' race/ethnicity and the percentage of minorities within in the state legislature. Consistent with the literature (Tate 1993; Griffin and Keane 2006; Barreto, Segura, and Woods 2004), we also employ cross-level interactions for Latino respondents residing in a Latino congressional district and black respondents residing in a black congressional district. These two sets of interactions (descriptive representation in Congress and state legislatures) are our primary explanatory variables. We use as

Table 2. Probability of Voting in 2006 and 2008 for Blacks and Latinos: Statewide Descriptive Representation and Majority–Minority Congressional District, CCES Data

	Model 1 (2006)		Model 2 (2008)	
	β (*SE*)	$p < \|z\|$	β (*SE*)	$p < \|z\|$
Black Respondent × Percentage Black in State Legislature	2.256	.036	0.044	.001
	(1.075)		(0.012)	
Percentage black in state legislature	–1.523	.081	–0.19	.001
	(0.872)		(0.005)	
Latino Respondent × Percentage Latino in State Legislature	–0.003	.760	0.046	.001
	(0.010)		(0.01)	
Percentage Latino in state legislature	0.007	.257	–0.014	.001
	(0.006)		(0.003)	
Black congressional representative	0.057	.577	0.06	.627
	(0.102)		(0.13)	
Black Respondent × Black Congressional Representative	0.089	.599	0.132	.490
	(0.169)		(0.19)	
Latino congressional representative	–0.017	.914	–0.311	.117
	(0.158)		(0.198)	
Latino Respondent × Latino Congressional Representative	–0.004	.981	0.507	.112
	(0.169)		(0.319)	
Black respondent	–0.373	.007	–0.145	.418
	(0.139)		(0.179)	
Latino respondent	–0.385	.006	–0.735	.001
	(0.141)		(0.181)	
Asian respondent	–0.697	.000	–0.647	.001
	(0.163)		(0.191)	
Age	–0.001	.952	–0.060	.001
	(0.010)		(0.010)	
Age squared	0.001	.000	0.001	.001
	(0.000)		(0.001)	
Education	0.402	.000	0.324	.001
	(0.022)		(0.027)	
Income	0.121	.000	0.102	.001
	(0.010)		(0.007)	
Male	0.667	.000	0.288	.001
	(0.048)		(0.071)	
Married	0.027	.690	0.158	.016
	(0.068)		(0.066)	
Democrat	0.541	.000	0.957	.001
	(0.048)		(0.114)	
Republican	0.422	.000	1.138	.001
	(0.076)		(0.135)	
Military veteran	–0.089	.250	–0.040	.708
	(0.077)		(0.107)	
Liberal	0.223	.003	0.177	.022
	(0.074)		(0.077)	
Conservative	0.290	.000	0.082	.531
	(0.069)		(0.130)	
Intercept	–1.650	.000	–1.054	.001
	(0.223)		(0.234)	
N	24,252		23,985	
Pseudo R^2	.135		.130	
Log likelihood	7724.532		11073.29	
χ^2	4272.501		2249.11	

The dependent variable is individual turnout in the 2006 and 2008 elections. Cooperative Congressional Election Study (CCES) 2006 and 2008 conducted by Polimetrix (http://web.mit.edu/polisci/portl/cces/index.html). Unstandardized logistic regression coefficients with robust standard errors in parentheses. Standard errors adjusted by clustering cases by state. Models estimated using Polimetrix survey weights.

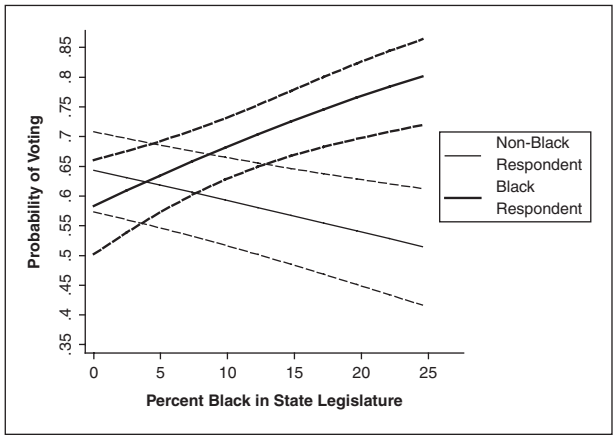

Figure 3. Probability of voting for a black respondent with percentage black in state legislature interaction, 2008
Bolded line = black respondent; nonbolded line = white respondent.

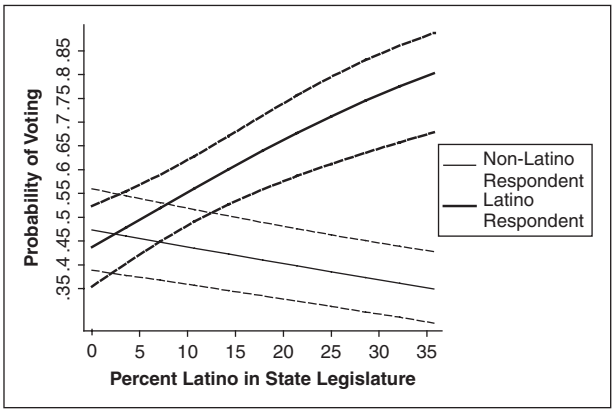

Figure 4. Probability of voting for a Latino respondent with percentage Latino in state legislature interaction, 2008
Bolded line = black respondent; nonbolded line = white respondent.

our dependent variable a postelection survey that asked if the respondent voted in the 2006 election. The models control for several standard individual-level predictors of turnout.[16]

Table 2 shows that African Americans residing in states with increased black representation in state legislatures are more likely to vote in both the 2006 election and the 2008 election, even when controlling for whether the respondent resides in a congressional district where he or she is descriptively represented in a dyadic sense. This is consistent with the CPS analysis reported in Table 1. *Over twelve years and six different surveys, we find the same statistically significant relationship.* The substantive effect of collective representation in state legislatures on black turnout is large, as reported in Figure 3. A black respondent residing in a state with no descriptive representation has a .57 probability of voting in 2008, all else equal. The same respondent residing in state where 20 percent of the seats are held by black lawmakers has a .77 probability of voting, a .20 difference. We argue this is because high levels of statewide descriptive representation within the state legislature provide substantive policy outcomes directly benefiting minorities (Owens 2005; Preuhs 2007). Collective representation may also lead to mobilization drives within these states and increase symbolic representation.

Table 2 includes both cross-level interactions (minority representation in state legislatures and in Congress). In line with some pervious works (Tate 1993; Gay 2001), residence in a minority-held congressional district is *not* a predictor of increased black turnout in either the midterm or the presidential election. Combined with the CPS analysis over time, the models provide compelling evidence that black turnout is increased with collective representation in state legislatures, but not necessarily at the federal level.

Table 2 finds that Latinos residing in states with high levels of Latino representation in the legislature are more likely to vote in the 2008 presidential election but not in the 2006 midterm election. Again, the substantive magnitude of this effect is substantial (see Figure 4), increasing the probability a Latino will vote by 35 percent when varying the Latino delegation in the state legislature from minimum (0) to maximum (40 percent) levels. Latinos represented by a Latino member of Congress are more likely to vote in the 2008 presidential election (90 percent confidence interval) but not in the midterm election. These findings are consistent with work by Barreto, Segura, and Woods (2004) showing descriptive representation matters for Latino turnout. The difference between Latinos and blacks in terms of dyadic representation in Congress may be because Latinos are less susceptible to Lublin's (1997) paradox regarding majority–minority congressional districts. Studying descriptive representation for both Latinos and blacks reveals similarities and differences.

Of course, Latinos in the United States are much more heterogeneous because of the presence of large immigrant populations. Cain, Kiewiet, and Uhlaner (1991) argue that later generations of Latinos are more likely to develop strong attachments to the Democratic Party because first-generation Latinos suffer from relatively lower levels of political knowledge. DeSipio and Uhlaner (2007) also suggest that generational status influences vote choice among Latinos. As a result, we argue that the impact of descriptive representation on Latino turnout should be greatest for relatively assimilated citizens (second- or third-generation Latinos).

Table 3 replicates the 2006 analysis on a subsample of only Latino respondents in the 2006 CCES survey.[17] We compare the probability of voting for first-, second-, and third-generation Latinos while varying descriptive representation in state legislatures and in Congress. We create separate binary variables for second- and third-generation Latinos (coded 1, others coded 0). Like the CPS data, noncitizens are omitted for all analyses of the CCES data as they cannot vote. We use cross-level interactions of a second-generation Latino multiplied by the percentage Latino in the state legislature and a second-generation Latino multiplied by whether he or she has a Latino congressional member. We do the same for third-generation Latinos. Column 1 of Table 3 indicates second-generation Latinos residing in states with increased Latino representation in the legislature are not more likely to vote in 2006 than first-generation Latinos (reference category). Column 2, however, shows that third-generation Latinos residing in states with more descriptive representation in the legislature are more likely to vote ($p < .05$, one-tailed test given our directional hypothesis).

Conclusion

National media headlines credited Obama's victory in the 2008 presidential election in part to the dramatic increase in the number of blacks and Latinos who turned out on election day. Black turnout rose 5 percent over 2004 levels, and Latino turnout rose 3 percent over the previous presidential election. This analysis puts these estimates in context, suggesting the turnout increases are to be expected when minorities hold elected office, and by some measures minority turnout in 2008 may be relatively modest.

Leveraging the rich variation in minority delegations across the fifty states and over the past decade, the analysis provides some of the first evidence that subnational descriptive representation (black and Latino delegations) increases turnout for African Americans and Latinos over the past ten years in both midterm and presidential elections. African Americans and Latinos are more likely to vote as the percentage of minorities serving in the state legislature grows, but the same is not true for whites. The substantive magnitude is large, ranging from a 10 percent to 40 percent increased probability of voting. Representation in state legislatures is largely overlooked in the published literature (for an exception, see Barreto, Segura, and Woods 2004). Large-sample surveys merged with state contextual data and appropriate statistical modeling for multilevel data give us confidence in the accuracy of the results. These findings, which stress the importance of collective representation, may explain some of the mixed and null findings about the importance of descriptive representation in Congress resulting from majority–minority districts. As Weissberg (1978, 547) writes, "If we accept collective representation as meaningful for citizens, several somewhat puzzling attitudes and kinds of behavior become more understandable."

Logic suggests that minority group size is a necessary but *not* sufficient condition for increasing minority turnout. Before the passage of Voting Rights Act (VRA), many Southern states had high black populations but low levels of representation in the state legislature and Congress. We would not expect to see the spillover benefits on turnout shown in this analysis under these conditions. Descriptive representation has long been considered the necessary link that gives minorities access to and representation in government, which in turn should boost participation (as we test in this article). Minority representation in the legislature is a necessary *and* sufficient condition to increase minority political participation. The findings we report here are consistent with the empowerment literature but expanded to include state legislatures.

When meaningful descriptive representation occurs, minority groups have the ability to affect state policy outcomes, incorporating minority populations into the political system (Key 1949). Descriptive representation may also confer symbolic benefits, such as reducing levels of political alienation among racial/ethnic minorities (Pantoja and Segura 2003). It appears that increased political participation may be a second-order consequence of the substantive and symbolic benefits minorities receive from descriptive representation in state legislatures.

Turnout of racial and ethnic minorities is also important for normative reasons. New research shows that elected officials respond more to the preferences of voters than nonvoters, confirming long-held fears that socioeconomic and race biases of the electorate hold consequences for public policy (Lijphart 1997; Griffin and Kean 2006). Nonvoters are disproportionally nonwhite, poor, and uneducated. While African American turnout has been found to be slightly higher than that of whites under certain conditions (Leighley and Nagler 1992), turnout rates for Latinos are considerably lower, holding other factors constant. Since racial and ethnic groups generally hold different political opinions (Claassen 2004) and support different political parties, elected officials disproportionately represent those who participate, potentially leading to policies biased against nonvoters. Understanding minority turnout is necessary for understanding the representativeness of our democratic institutions.

Interestingly, our findings show only modest evidence for the contention that minority empowerment lowers the rate of participation among whites (Wolfinger and Rosenstone 1980; Verba, Schlozman, and Brady 1995). While living in a district represented by a black elected official has been consistently linked to lower levels of

Table 3. Probability of Voting in 2006 for Latinos

	Model 1		Model 2	
	β (*SE*)	$p < \|z\|$	β (*SE*)	$p < \|z\|$
Second-generation Latino × Percentage Latino in State Legislature	–0.026	.187		
	(0.019)			
Third-generation Latino × Percentage Latino in State Legislature			0.030	.10
			(0.018)	
Percentage Latino in state legislature	0.009	.435	–0.008	.304
	(0.011)		(0.008)	
Latino congressional representative	–0.049	.778	0.081	.577
	(0.174)		(0.145)	
Second-generation Latino × Latino Congressional Representative	0.165	.540		
	(0.270)			
Third-generation Latino × Latino Congressional Representative			–0.287	.370
			(0.320)	
Second-generation Latino	0.509	.151	0.195	.225
	(0.354)		(0.161)	
Third-generation Latino	–0.162	.474	–0.515	.110
	(0.227)		(0.322)	
Age	–0.006	.853	–0.006	.854
	(0.031)		(0.030)	
Age squared	0.001	.094	0.001	.088
	(0.0004)		(0.0004)	
Education	0.252	.000	0.250	.000
	(0.054)		(0.054)	
Income	0.128	.001	0.125	.001
	(0.038)		(0.037)	
Male	0.384	.005	0.395	.004
	(0.137)		(0.138)	
Married	–0.035	.882	–0.032	.893
	(0.238)		(0.240)	
Democrat	0.480	.028	0.474	.029
	(0.218)		(0.218)	
Republican	0.297	.554	0.279	.566
	(0.502)		(0.487)	
Military veteran	–0.189	.523	–0.199	.505
	(0.296)		(0.298)	
Liberal	0.353	.179	0.332	.213
	(0.263)		(0.267)	
Conservative	0.167	.587	0.163	.594
	(0.307)		(0.306)	
Government worker	0.575	.024	0.578	.023
	(0.255)		(0.255)	
Intercept	–1.481	.012	–1.248	.036
	(0.588)		(0.597)	
N	2,112		2,112	
Pseudo-R^2	.13		.13	
Log likelihood	674.27		673.34	
χ^2	1546.33		921.30	

The dependent variable is individual turnout in the 2006 elections. Cooperative Comparative Election Study 2006 conducted by Polimetrix. Unstandardized logistic regression coefficients with robust standard errors in parentheses. Standard errors adjusted by clustering cases by state. Models estimated using Polimetrix survey weights.

engagement among whites (Bobo and Gilliam 1990; Gay 2001), residing in a state with a large black delegation does not seem to produce the same effect. Gay (2001) argues the low level of political competiveness that typifies most areas of minority empowerment partially explains the relatively low rate of participation among whites. Since most whites in most states live in areas that are not represented by a minority official, collective minority representation may boost minority turnout without lowering white turnout. That is, minority participation may increase because of the policy benefits that collective representation offers, while white turnout may be minimally affected as the majority of whites continue to reside in relatively competitive nonmajority–minority districts. Of course, this is just one possible explanation, and future research is needed on this point.

Following Pitkin (1967), scholars have long noted the distinction between descriptive and substantive representation. While some have raised concerns about whether or not descriptive representation is likely to translate into substantive outcomes (Williams 1998), recent studies of race and representation in state legislatures have found this link (Owens 2005; Preuhs 2007). As scholars of local politics have long known, whatever trade-off exists between descriptive and substantive representation does not appear to import perfectly to subnational governments. Scholars know less about how descriptive representation affects the political behavior of minority groups, and research looking at minority delegations in state legislatures is rare. While research in this field has explored the influence of in-group size and dyadic empowerment, scholars have failed to consider the possible effect of collective descriptive representation in state legislatures. Minority turnout increases in the 2008 presidential election are predictable when understood in terms of the effect of subnational descriptive representation.

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Notes

1. In the 1996 Current Population Survey (CPS), 7,688 respondents reported being black, 2,011 reported being Asian or Pacific Islander, and 4,315 reported being of Hispanic origin.
2. In 1996, for example, state sample sizes ranged from a high of 5,797 California respondents and 4,941 New York respondents to a low of 851 respondents from Hawaii. Unlike many surveys, the CPS includes robust samples from all fifty states. Similar state samples are found in the 1998, 2002, and 2006 CPS samples.
3. This sample is constructed using a technique called sample matching. The researchers create a list of all U.S. consumers to generate a set of demographic characteristics that should be mirrored in the survey sample. Then, using a matching algorithm, the researchers select respondents who most closely resemble the consumer data from a pool of opt-in participants. The sample is stratified to ensure large samples within states. More information regarding sample matching is available at http://web.mit.edu/polisci/portl/cces/material/sample_matching.pdf. These data were collected over a three-month period from September to November of 2006 and 2008. The models are estimated using Polimetrix survey weights.
4. This is in contrast to 20 percent overreporting of turnout in the American National Election Study and Black National Election Survey.
5. For more information see www.naleo.org/directory.html and www.jointcenter.org/index.php/data_resources.
6. The presidential margin of victory raw data come from President Elect (www.presidentelect.org); the data for both the gubernatorial margin of victory and the senatorial margin of victory come from the *Almanac of American Politics* (various years).
7. For each margin of victory, the difference between the percentage of votes for the winner and the percentage for the loser is turned into decimals by placing the difference in the formula 1 – (% for winner – % for runner-up).
8. The CPS is not an opinion survey and thus does not include partisanship. Beyond this omitted factor, our models include a robust set of individual-level variables.
9. Three binary variables measure whether the respondent is an African American (coded 1), Latino (coded 1), or Asian or Pacific Islander (coded 1), with white non-Hispanic as the reference group (coded 0). A binary variable measures gender (*male* = 1, *female* = 0). Age is measured in years, as the person's age as of the end of the survey week. To measure any nonlinear effects of declining participation with older age, a square term for age in years is also included. Annual family income is measured on a 13-point ordinal scale. The educational attainment of the respondent is measured on a 16-point ordinal scale: "What is the highest level of school you have completed or the highest degree you have received?" 1 = *less than 1st*; 2 = *1st–3rd grade*; 3 = *5th–6th grade*; 4 = *7th–8th grade*; 5 = *9th grade*; 6 = *10th grade*; 7 = *11th grade*; 8 = *12th grade, no diploma*; 9 = *high school graduate—diploma or equivalent*; 10 = *some college, no degree*; 11 = *associate's degree—occupational or vocational*; 12 = *associate's degree—academic program*; 13 = *bachelor's degree*; 14 = *master's degree* (MA, MS, MEng, MED, MSW); 15 = *professional school degree* (MD, DDS, DVM); 16 = *doctorate degree* (PhD, EdD).

10. The twelve industry and occupation job categories measuring a respondent's primary occupation are used. These include (1) executive, administration, and managerial; (2) professional specialty; (3) technicians and related; (4) sales; (5) administrative and clerical support; (6) protective service; (7) service; (8) precision production, craft and repair, machine operators, assemblers, and private household occupations; (9) transportation and material moving; (10) laborers, cleaners, and handlers; (11) farming forestry and fishing; and (12) armed forces. Because of the low number of responses, a separate binary variable for armed forces was not included, with respondents whose occupation was armed forces coded 0. A series of binary variables was created for each occupation, with production and construction as the reference category. Changes in the CPS question wording over time create a slightly different set of occupation variables in 2002 and 2006.
11. "How long (have you/has [name]) lived at this address?" Choices: *no response*, *refused*, *don't know*, *not in universe*, *less than 1 month*, *1–6 months*, *7–11 months*, *1–2 years*, *3–4 years*, *5 years or longer*. All who answered 5 years or longer were coded 1; others were coded 0. Respondents answering no response, refused, don't know, or not in universe were coded as missing. Military veterans were coded 1; others were coded 0.
12. For married, from the question "Are you now married, widowed, divorced, separated or never married?" those respondents who selected "married—spouse present" or "married—spouse absent" were coded 1. Nonmarried persons were coded 0. Child includes the number of own children younger than 18 years of age. All those with answers more than 0 were coded as 1. All those answering 0 were coded as 0.
13. Geography or location is measured with binary variables for urban and suburban residents, with rural residents and those who did not identify their location as the reference group (coded as 0). Urban is from geography—MSA or central city status. All those who said "central city" were coded 1; everyone else was coded 0. Change: in 2004, central city status was called "principal city." Suburban is from geography—MSA or central city status. All those who said "balance on MSA" were coded 1; everyone else was coded 0. Change: in 2004, balance on MSA was called "balance metropolitan."
14. The models in Table 1 and Appendix Table 1 are estimated using HLM 6.0 software. The models show population-averaged results with four random effects: a random intercept and random slopes for black, Latino, and Asian respondents. Given the complexity of this model, HLM 6.0 cannot estimate the uncertainty in these predictions when graphing predicting probabilities. To address this issue, we have estimated the models presented in Table 1 as logistic regressions with state-clustered standard errors and generated predicted probability graphs presented in Figures 2 and 3. These graphs include the standard 95 percent confidence intervals associated with the predictions. We present the Stata graphs with confidence here and the HLM 6.0 graphs in an appendix, which is based on a superior estimation procedure. The substantive effects using Stata are 2 percent to 3 percent smaller than graphs without confidence intervals estimated using HLM 6.0 software.
15. For each year, respondents residing in the top 20 percent of states in terms of black population size are omitted from the sample (these also tend to be the states with the largest minority representation in the legislature). The base interaction model (Black Respondent × Percentage Black in the State Legislature) was reestimated for the 1996, 1998, 2002, and 2006 CPS data sets. This test of the robustness of our models addresses concerns about an outlier effect and whether the results are driven by states with large minority populations. The interaction term between a black respondent living in a state with increased black representation in the state legislature is positive and statistically significant in 1996, 1998, 2002, and 2006. Similar findings were found for the percentage Latino in state legislatures but were somewhat less consistent. The models in Table 1 were also reestimated with a combined measure of the percentage black plus the percentage Latino in the state legislature (percentage minority) as the collective descriptive representation variable. This variable was interacted with both being a black and being a Latino individual. The interaction terms from these models are positive and statistically significant in each year except for blacks in 2006. This suggests blacks and Latinos may gain descriptive representative from one another. Finally, the percentage black and percentage Latino in the state legislature variables were replaced with the natural log of those variables. These variables were then interacted with black and Latino respondents, respectively. Yet again the results are similar to the original specification. The interaction terms are positive and significant in all cases except in 2002 (Latino interaction $p < .101$) and 2006 (both Latino and black interactions). The results of these alternative model specifications are available online at http://prq.sagepub.com/supplemental/.
16. The models also include standard demographic controls for gender (males coded 1, females coded 0), age (in years), and age squared to capture any nonlinear effects, education (a 6-point scale from *no high school* to *postgraduate degree*), income (a 12-point ordinal scale from *less than $10,000* to *$120,000–150,000*), marital status (coded 1 if married and 0 otherwise), and race/ethnicity (binary variables for black, Asian, and Latino respondents). Following previous research suggesting that independents have unique preferences on policy issues compared to partisans, we measure partisanship with a standard 3-point measure with binary variables for Democrat and Republican with independents as the reference category. In the 2006 CCES variable 3005

is used with 36,346 responses to this question: "Generally speaking, do you think of yourself as a . . . ? Democrat, Republican, independent, other." We add to this model two binary variables for ideology (conservative and liberal), with moderates as the reference category and one for military veteran or currently in the military. When the models are replicated controlling for the competitiveness of candidate races in the respondent's state, voter registration laws, and state socioeconomic conditions, the findings are substantively unchanged. For simplicity, these additional controls are omitted from this model.

17. The inclusion of our interactive terms requires us to model the effect of generational status separately for third-generation and second-generation respondents. Combining models 1 and 2 of Table 3 generates a substantial level of multicollinearity because of the inclusion of four interaction terms.

References

Banducci, Susan A., Todd Donovan, and Jeffrey A. Karp. 2004. Minority representation, empowerment and participation. *Journal of Politics* 66:534-56.

Banducci, Susan A., Todd Donovan, and Jeffrey A. Karp. 2005. Effects of minority representation on political attitudes and participation. In *Diversity in democracy: Minority representation in the United States*, ed. Gary M. Segura and Shaun Bowler, 193-215. Charlottesville: University of Virginia Press

Barreto, Matt A. 2007. ¡Sí se puede! Latino candidates and the mobilization of Latino voters. *American Political Science Review* 101:425-41.

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* 98:65-75.

Bobo, Lawrence D., and Frank D. Gilliam. 1990. Race, sociopolitical participation, and black empowerment. *American Political Science Review* 84:377-93.

Bratton, Kathleen A., and Kerry L. Haynie. 1999. Agenda-setting and legislative success in state legislatures: The effects of gender and race. *Journal of Politics* 61:658-79.

Bryk, A. S., and S. W. Raudenbush. 2002. *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage.

Cain, Bruce E., D. Roderick Kiewiet, and Carole J. Uhlaner. 1991. The acquisition of partisanship by Latinos and Asian Americans. *American Journal of Political Science* 35:390-422.

Cameron, Charles, David Epstein, and Sharyn O'Halloran. 1996. Do majority–minority districts maximize substantive black representation in Congress? *American Political Science Review* 90:794-812.

Claassen, Ryan L. 2004. Political opinion and distinctiveness: The case of Hispanic ethnicity. *Political Research Quarterly* 57:609-20.

Cox, Gary, and Michael Munger. 1989. Closeness, expenditure, turnout: The 1982 U.S. House elections. *American Political Science Review* 83:217-32.

DeSipio, Louis, and Carole Jean Uhlaner. 2007. Immigrant and native: Mexican American presidential vote choice across immigrant generations. *American Politics Research* 35: 176-201.

Donovan, Todd, Janine Parry and Shaun Bowler. 2005. O other, where art thou? Support for multiparty politics in the United States. *Social Science Quarterly* 86 (10): 147-159.

Downs, Anthony. 1957. *An economic theory of democracy*. New York: Harper & Row.

Eisinger, Peter K. 1982. Black employment in municipal jobs: The impact of black political power. *American Political Science Review* 76:380-92.

Fording, Richard C. 2003. Racial attitudes, racial politics, and welfare reform. In *Race, welfare and the politics of reform*, ed. S. F. Schram, J. Soss, and R. C. Fording, 72-100. Ann Arbor: University of Michigan Press.

Fraga, Luis, John Garcia, Rodney Hero, Michael Jones-Correa, Valerie Martinez-Ebers, and Gary Segura. 2006. Su casa *es* nuestra casa: Latino politics research and the development of American political science. *American Political Science Review* 100:515-22.

Fraga, Luis, John Garcia, Rodney Hero, Michael Jones-Correa, Valerie Martinez-Ebers, and Gary Segura. Forthcoming. *Making it home: Latino lives in America*. Philadelphia: Temple University Press.

Gay, Claudine. 2001. The effect of black congressional representation on political participation. *American Political Science Review* 95:589-602.

Griffin, John D., and Michael Keane. 2006. Descriptive Representation and the Composition of the African American Turnout. *American Journal of Political Science* 50:998-1012.

Griffin, John D., and Brian Newman. 2008. *Minority report: Evaluating political equality in America*. Chicago: University of Chicago Press.

Haynie, Kerry L. 2001. *African American legislators in the state legislatures*. New York: Columbia University Press.

Hero, Rodney E. 1998. *Faces of inequality: Social diversity in American politics*. New York: Oxford University Press.

Hero, Rodney E. 2003. Social capital and racial inequality in America. *Perspectives on Politics* 1:113-22.

Hero, Rodney E. 2007. *Racial diversity and social capital: Equality and community in America*. Cambridge: Cambridge University Press.

Hero, Rodney E., and Caroline J. Tolbert. 1995. Latinos and substantive representation in the U.S. House of Representatives: Direct, indirect or nonexistent? *American Journal of Political Science* 39:640-52.

Hero, Rodney E., and Caroline J. Tolbert. 1996. Racial/ethnic diversity interpretation of politics and policy in the

states of the U.S. *American Journal of Political Science* 40:851-71.

Hill, Kim, and Jan Leighley. 1999. Racial diversity, voter turnout, and mobilizing institutions in the United States. *American Politics Quarterly* 27:275-95.

Jenkins, Craig J., David Jacobs and Jon Agnone. 2003. Political opportunities and African-American protest, 1948-1997. *The American Journal of Sociology* 109 (2): 277-303

Kerr, Brinck, and Kenneth R. Mladenka. 1994. Does politics matter? A time-series analysis of minority employment patterns. *American Journal of Political Science* 38:918-44.

Key, V. O. 1949. *Southern politics in state and nation*. New York: Knopf.

King-Meadows, Tyson, and Thomas F. Schaller. 2006. *Devolution and black state legislators: Challenges and choices in the twenty-first century*. Albany: State University of New York Press.

Kousser, Morgan. 1999. *Colorblind injustice: Minority voting rights and the undoing of the second reconstruction*. Chapel Hill: University of North Carolina Press.

Leal, David L., Valerie Martinez-Ebers, and Kenneth J. Meier. 2004. The politics of Latino education: The biases of at-large elections. *Journal of Politics* 66:1224-44.

Leighley, Jan E. 2001. *Strength in numbers? The political mobilization of racial and ethnic minorities*. Princeton, NJ: Princeton University Press.

Leighley, Jan E., and Jonathan Nagler. 1992. Individual and systemic influences on turnout: Who votes? *Journal of Politics* 54:718-41.

Lijphart, Arend. 1997. Unequal participation: Democracy's unresolved dilemma—Presidential address, American Political Science Association, 1996. *American Political Science Review* 91:1-14.

Lopez, Mark Hugo, and Paul Taylor. 2009. Dissecting the 2008 electorate: Most diverse in US history. Pew Hispanic Center. http://pewresearch.org/pubs/1209/racial-ethnic-voters-presidential-election.

Lublin, David. 1997. *The paradox of representation: Racial gerrymandering and minority interests in Congress*. Princeton, NJ: Princeton University Press.

Marschall, Melissa J. 2005. Minority incorporation and local school boards. In *Besieged*, ed. William G. Howell, 173-98. Washington, DC: Brookings Institution.

Marschall, Melissa and Paru Shah. 2007. The attitudinal effects of minority incorporation: Examining the racial dimensions of trust in urban America. *Urban Affairs Review* 42: 629-658.

McDonald, Michael P., and Samuel L. Popkin. 2001. The myth of the vanishing voter. *American Political Science Review* 95:963-74.

Meier, Kenneth J., Eric Gonzalez Juenke, Robert Wrinkle, and J. L. Polinard. 2005. Structural choices and representational biases: The post-election color of representation. *American Journal of Political Science* 49:758-68.

Mladenka, Kenneth R. 1989a. Barriers to Hispanic employment success in 1,200 cities. *Social Sciences Quarterly* 70: 391-407.

Mladenka, Kenneth R. 1989b. Blacks and Hispanics in urban politics. *American Political Science Review* 83:165-92.

Oliver, Eric, and Tali Mendelberg. 2000. Reconsidering the environmental determinants of white racial attitudes. *American Journal of Political Science* 44:574-89.

Orey, Byron D'Andra, L. Marvin Overby, and Christopher W. Larimer. 2007. African-American committee chairs in U.S. State Legislatures. *Social Science Quarterly* 88:619-39.

Owens, Chris T. 2005. Black substantive representation in state legislatures from 1971–1994. *Social Science Quarterly* 86: 779-91.

Pantoja, Adrian D., and Gary M. Segura. 2003. Does ethnicity matter? Descriptive representation in the statehouse and political alienation among Latinos. *Social Science Quarterly* 84:441-60.

Pitkin, Hannah. 1967. *The concept of representation*. Berkeley: University of California Press.

Platt, Matthew. 2008. Participation for what? A policy-motivated approach to political activism. *Political Behavior* 30: 391-413.

Preuhs, Robert R. 2006. The conditional effects of minority descriptive representation: Black legislators and policy influence in the American states. *Journal of Politics* 68:585-99.

Preuhs, Robert R. 2007. Descriptive representation as a mechanism to mitigate policy backlash: Latino incorporation and welfare policy in the American states. *Political Research Quarterly* 60:277-92.

Primo, David M., Matthew L. Jacobsmeier, and Jeffrey Milyo. 2007. Estimating the impact of state policies and institutions with mixed-level data. *State Politics and Policy Quarterly* 7:446-59.

Segura, Gary M., and Shaun Bowler, eds. 2005. *Diversity in democracy: Minority representation in the United States*. Charlottesville: University of Virginia Press.

Smith, Daniel A., and Caroline J. Tolbert. 2004. *Educated by initiative: The effects of direct democracy on citizens and political organizations in the American states.* Ann Arbor: University of Michigan Press.

Steenbergen, Marc R., and Bradford S. Jones. 2002. Modeling multilevel data structures. *American Journal of Political Science* 46:218-37.

Swain, Carol M. 1993. *Black faces, black interests: The representation of African Americans in Congress*. Cambridge, MA: Harvard University Press.

Tate, Katherine. 1993. *From protest to politics: The new black voters in American elections*. Cambridge, MA: Harvard University Press.

Tate, Katherine. 2001. African Americans and their representation in Congress: Does race matter? *Legislative Studies Quarterly* 26:623-38.

Tate, Katherine. 2003. *Black faces in the mirror: African Americans and their representatives in the U.S. Congress*. Princeton, NJ: Princeton University Press.

Verba, Sidney, Kay Schlozman, and Henry Brady. 1995. *Voice and equality: Civic voluntarism in American politics.* Cambridge, MA: Harvard University Press.

Weissberg, Robert. 1978. Collective vs. dyadic representation in congress. *American Political Science Review* 72: 535-47.

Welch, Susan, Michael Combs, and John Gruhl. 1988. Do black judges make a difference? *American Journal of Political Science* 32:126-36.

Williams, Melissa. 1998. *Voice, trust, and memory: Marginalized groups and the failings of liberal representation*. Princeton, NJ: Princeton University Press.

Wolfinger, Raymond, and Steven J. Rosenstone. 1980. *Who votes?* New Haven, CT: Yale University Press.