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**Collective Representation as a Mobilizer:
Race/Ethnicity, Gender, and their Intersections at the State Level**

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Abstract

Prior research has found that descriptive representation by race, ethnicity, or gender increases political action, but it has paid less attention to how the intersection of these identities influences participation. We extend this literature by assessing the effects on voter turnout of collective descriptive representation in U.S. state legislatures on the basis of race, ethnicity, gender, and their intersections. We argue that members of historically excluded groups respond to the overall composition of their state's legislature. We test this proposition in seven elections (2000, 2002, 2004, 2006, 2008, 2010, and 2012). Our results are consistent with the minority empowerment literature, as overall collective representation does substantially increase turnout among previously excluded groups. However, the impact varies intersectionally. For white women, gender trumps race, as higher collective gender representation, regardless of race or ethnicity, increases voter turnout. For African Americans, race trumps gender, as both black men and women respond most consistently to higher levels of collective racial representation. For Latinos, we find less consistent results, but note a collective ethnic turnout effect for 2002 and 2006. We conclude that collective representation, especially at the intersection of identities, is an important factor influencing levels of turnout among previously excluded groups.

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Introduction

Citizens must participate for a democratic system to function well. Voting has special importance, because although it is the most routinized form of political participation, it is also the most powerful; collectively, votes determine who governs. Nonetheless only about half of the eligible United States citizenry votes, and there are real political consequences when voters differ systematically from nonvoters. Conversely, politics can change turnout; representation and mobilization impact who votes.

In particular, although descriptive representation evokes skepticism among theorists, it may increase political participation among groups otherwise excluded from power. Descriptive representation (Pitkin 1967) has been dismissed as a poor cousin of substantive representation, but it is an important device for the underrepresented to assess who might protect their interests in the future, what Pitkin called “potential responsiveness” (Pitkin, 1967, p. 233; Uhlaner 2012). Individuals often connect to the larger political world via leaders who enhance a sense of duty and who, especially if recognized as looking out for the citizen’s interests, can effectively mobilize (Uhlaner 1989; Jang 2009). This connection is especially important for members of under-represented groups who otherwise may look at politics as a “white man’s game.” Theoretically, then, we suggest that this potentiality for representation may be discernable through “collective” representation, or the idea of “*institutions* collectively representing a people” (Weissenberg 1978, italics in original), and thus serve as a mobilizing cue for previously excluded groups. Collective representation is an important aspect of representation which is often overlooked, and one that could shed light on the complex questions of representation within our electoral institutions.

Of course there are many possible bases for collective descriptive representation. We focus on race, ethnicity and gender as they are important categories in contemporary U.S. politics. Our study thus adds to the minority empowerment literature. But treating these categories separately misses a crucial

point: they intersect, and that intersectionality matters. White women have different experiences than Latinas; African American men have different experiences than African American women. In this paper, we assess whether being collectively descriptively represented affects turnout by looking at seven elections, the presidential races of 2000, 2004, 2008, and 2012, and the off-year elections of 2002, 2006, and 2010 to assess the intersectional impact of collective descriptive representation on voter participation.

The fifty U.S. states provide a convenient laboratory for assessing this impact. The voting rates of men and women of color and of white men and women differ widely across the states. At the same time, although white men comprise the majority of legislators in almost all states¹, the racial, ethnic, and gender composition of state legislatures varies widely. Thus, states differ in the extent to which women and people of color see themselves reflected in their state legislature. By taking account of the individual characteristics which are known to affect turnout, we can assess whether individuals also respond to the collective degree to which they have representatives who share their gender and race or ethnicity. We hypothesize that increased collective descriptive representation will increase turnout, but that this effect will be particularly clear for underrepresented individuals from groups historically excluded from political power. We build on earlier work by focusing on the intersections of race and ethnicity with gender, assessing to what extent men and women of different races and ethnicity respond differently to their degree of collective representation.

Representation occurs at multiple elected levels, from municipal politics through statewide and federal office. State legislatures provide an excellent level for assessing the impact of representation.² Ford and Dolan (1990) explain that one primary reason for studying gender and representation at the

¹ Hawaii and New Mexico are the exceptions.

² Note that because we use the state legislature composition as our key independent variable, we assess turnout only in the fifty states, excluding the District of Columbia.

state level is practicality: unlike Congress, there are a large number of women in state legislatures, which lends itself to systematic study. We note that the same point applies to members of ethnic and racial minorities.³ While citizens may pay some attention to local politics, they are not voting at rates equal to state-wide elections. However, while the overall state legislature is fairly visible, with television, internet, and print accounts including images and names of legislators producing an overall impression, individual members often are not well known. We thus hypothesize that citizen's respond to the overall composition of their legislature, what other scholars have called "collective" representation, rather than "dyadic" representation where citizens are responding primarily or only to their own representative (Weissberg 1978; Atkeson and Carrillo 2007, Rocha, et al 2010). In other words, while individual state legislative *elections and members* themselves may be less visible (dyadic), the overall state legislative *composition* may cue certain historically underrepresented identities (collectively). Similar to Atkeson and Carrillo (2007) and Rocha et al. (2010), we use the composition of state legislatures to assess the effect of collective descriptive representation on voter turnout rates. We expand on both of these studies by investigating the intersection of race and ethnicity with gender.

In what follows, we first review prior research on participation and the impact of representation. Then, we describe our data and approach. Finally, we examine the effects of legislative composition on individual voter turnout in the federal elections from 2000 through 2012 for men and women of different races and ethnicities.

Prior Research

There are well-established results on the participation of people of different gender, ethnicity, and race. Overall, historically white males had the highest voting rates in the United States, but the gender edge evaporated in the 1980s while racial and ethnic differences have narrowed, but remain. The turnout rates for men and women became essentially equal in 1980 and 1982, and ever since they have been

³ The congressional delegations of many states are too small to calculate meaningful proportions.

higher for women (Center for American Women and Politics 2011).⁴ Note, however, that for most political activities other than voting, men still outpace women (Verba, Schlozman, Brady 1995, 254-257; Conway, Steuarnagel, and Ahern, 2005, 94-97). African Americans also, historically, participated less than other Americans. That gap has been decreasing, reflecting the Civil Rights movement and other changes, until by 1990 the African American turnout rate was close to that of whites. Obama's candidacy and presidency has further mobilized African American voting; in 2008 turnout of African Americans was just 1.4 points below that of non Hispanic whites and moved two points higher in 2012 (File, 2013, p. 3).⁵ Latinos vote at lower rates than either African Americans or whites, even when the comparison is, appropriately, limited to citizens. Latino turnout rose by about two points per election from 2000 to 2004 to 2008, with bigger increases among younger citizens, and then leveled off in 2012 (File, 2013, p.3 and p. 7).⁶ Turnout rates, thus, differ by race, gender, and ethnicity.

4 A similar increase in female voting rates occurred in other countries; using 1996 data from 22 countries, including then-new democracies, Norris (2002, 85-91) found no difference in turnout by gender.

5 In the data reported here, from File (2013), a Current Population Survey publication, the denominator is the number of citizens age 18 and older while the numerator is the number of these voting eligible citizens who report casting a ballot. This is the same definition we use in our data analysis later in this paper. Turnout can be measured several different ways. For example, when non citizens are included in the denominator, the turnout rates for Latinos and Asian Americans drop. When the denominator includes only persons registered to vote, turnout rates appear higher. Race and ethnicity can also be assigned in different ways. In File (2013), Latinos include people who said they were Hispanic; African Americans and Asians include those people who reported they were that single race, while whites include people who reported they were the single race White and that they were not Hispanic. As explained below and detailed in the appendix, the definition we use includes some people who report multiple races (race-alone-or-in-combination).

6 Among Asian Americans, however, turnout rates jumped by over three points in 2008 and remained essentially the same in 2012 (File, 2013, p. 3).

In order to assess the “added” effect of collective representation on voter turnout, we need to first account for the factors that have traditionally predicted higher levels of voter participation. The literature has established multiple individual level factors which affect turnout. A few of these are specific to gender, ethnicity or race, while others just happen to be distributed unevenly across racial, ethnic, and gender groups. Income, education, and (older) age are of the latter type; they increase voting turnout for everyone (Milbrath and Goel, 1965; Verba Nie and Kim, 1978; Conway 2000) and are unevenly distributed, age because of differential birth rates across racial and ethnic groups (US Census Bureau 2011). Other demographic influences on activity, such as being an immigrant, are indeed tied more substantively to ethnicity (Uhlener, Cain, Kiewiet 1989; Arvizu and Garcia, 1996; DeSipio, 1996a,1996b; Ramakrishnan 2005; Wong et al. 2011). Attitudes and beliefs, such as efficacy, group consciousness, perceived discrimination, and interest in politics, also affect participation, and these are often substantively related to race, ethnicity, and gender, especially the belief that political activity is appropriate, or not, for people like oneself (Miller, Gurin, Gurin, and Malanchuk 1981; Hooghe and Stolle 1986; Jackson 1987; Ardrey 1994; Dawson 1994; Lien 1994; Diaz, 1996; Verba, Burns, Schlozman 1997; Wilcox 1997; Leighley and Vedlitz, 1999; Conway 2000; Shaw, de la Garza, and Lee, 2000; Burns, Schlozman, Verba 2001; Atkeson 2003; Stokes 2003; Delli Carpini and Keeter 2005; Sanchez 2006; Kittilson and Schwindt-Bayer 2010; Valdez 2011). Conversely, attitudes can increase activity; turnout is higher among African Americans with a sense of group consciousness, or linked fate, than among whites of similar income and education (Verba and Nie, 1972; Miller, Gurin, Gurin, and Malanchuk 1981; Jackson 1987; Ardrey 1994; Dawson 1994; Wilcox 1997).

But whether or not people participate in politics reflects more than their individual characteristics. The minority empowerment literature has suggested that when, and where, people in underrepresented groups achieve greater power, their political attitudes shift and their participation

increases. Specifically, a number of studies have assessed the impact on participation of descriptive representation, namely the presence of elected representatives, or in some studies candidates for office, who share race, ethnicity, or gender with the potential participant. For example, Latino turnout increases when there are Latino candidates or the likelihood of Latino candidates (Pantoja and Segura, 2003; Barreto, Segura, and Woods 2004; Barreto, Villareal, and Woods 2005; and Barreto 2007) and where their interests are represented (Jeong 2012). Moreover, Latinos register and vote more when recruited by a Latino organization (Shaw, de la Garza, and Lee 2000).⁷ The literature suggests that African American participation and trust increases with collective representation (Bobo and Gilliam 1990; Leighley 2001; Banducci, Donovan, and Karp 2004; Griffin and Keene, 2006), but there is mixed evidence when considering dyadic representation in Congress (Gay 2001; Tate 2003). For women, several studies confirm an increase in registration, voting, participation, information, and interest among women when they have the chance to vote for a female candidate and/or are represented by a woman in both the U.S. context (Hansen, 1997; Verba, Burns, and Scholzman 1997; High-Pippert and Comer, 1998; Burns, Scholzman, and Verba 2001; Atkeson, 2003; Campbell & Wolbrecht, 2006; Reingold and Harrell 2010; Dolan 2008; Koch 1997; Sapiro and Conover 1997), as well as within a comparative, cross-national context (Wolbrecht & Campbell, 2007; Karp and Banducci, 2008; Desposato and Norrander, 2009; Kittilson and Schwindt-Bayer, 2010; Barnes & Burchard 2013; but see Zetterberg, 2009 as an exception). However, other scholars have found little evidence to support the idea that descriptive representation affects individual's attitudes or behavior (Lawless, 2004; Dolan, 2006).

The minority empowerment literature discussed above offers several hypotheses for the mechanism connecting descriptive representation to activity. As noted, increased representation

⁷ However, Leighley (2001) finds no increase in turnout nor in overall participation where Latinos hold office, but she uses a national sample (the Citizen Participation Study (Verba, Scholzman, Brady 1995) with only a few hundred Latino citizen respondents.

increases knowledge about government and interest in politics, both of which increase participation. Descriptive representation may increase the perception that political action will benefit oneself, making it more worthwhile. Representatives from minority groups are more likely to be a trusted part of networks which can provide information and otherwise recruit people to be active. The existence of these representatives also sends a message to members of historically underrepresented groups that politics is suitable for people like themselves. Although the evidence for any specific mechanism is sparse, substantial evidence suggests an overall connection. Of course, it is possible that the causality is reversed, that higher turnout in some district by members of an underrepresented group, mobilized in some other way, leads to victory by a candidate that increases the group's representation. In other words turnout might precede legislative representation instead of following it. We return to this concern later. For the moment we note that the minority empowerment literature usually addresses the widespread endogeneity issue by discussing the processes that suggest a significant causal link running from the representatives to the voters' behavior.

We take issue with one common thread within much of the extant research, namely the idea that dyadic representation—a one-to-one representational mapping between legislator and citizen—is the most important for understanding how representation impacts participation. As Atkeson and Carrillo (2007) explain, “[c]ollective representation focuses on how well the institution as a whole represents its citizens, while dyadic representation ask how well a specific member of a governing body represents his or her constituent” (80). In their study, Atkeson and Carrillo assess the impact of collective descriptive representation, measured as the “percentage of females in the state legislature” and “the presence...or absence...of a female governor” (88), to determine if increases in collective representation correspond to increases in women's feelings of external efficacy. Using data from the American National Elections study “pooled from 1988 to 1998” to measure external efficacy, Atkeson and Carrillo find “that

collective female representation influences external efficacy in a positive way. When greater proportions of female state legislators are present, the likelihood that women feel better about government...improves.” (94) They “suggest an important role for collective descriptive representation in shaping attitudes and behaviors in a democratic society” (96) and that this may impact other forms of political activity.

In the study most similar to ours, Rocha et al. (2010) find that turnout both of African Americans and Latinos increases as a function of collective representation in state legislatures. They use Current Population Survey data for the 1996, 1998, 2002 and 2006 elections. For the 2006 and 2008 elections they use the Cooperative Congressional Election Studies data and additionally consider whether African American or Latino respondents are represented dyadically by someone of the same race or ethnicity in Congress. In all of these years, they find that the African American voter turnout rate is higher in states with a higher proportion of African Americans in the legislature and that having a co-racial member of Congress has no effect. They find both variables increase Latino turnout in 2008 and neither appears to do so for Latinos in 2006, in the CCES data, except among third generation Latinos. Using the CPS data they find that state legislature composition does increase Latino turnout in 1996, 1998, 2002, and 2006. Their results for Latinos are thus somewhat less consistent than those for African Americans. The independent variables they use differ from ours. The biggest difference, though, is that they do not consider how gender intersects with race or ethnicity.

We agree with both Atkeson and Carrillo (2007) and Rocha, et al (2010) that there does not necessarily have to be a dyadic relationship in order to measure the mobilizing effects of descriptive representation. Collective representation may provide an even better cue or signal to constituents that institutions are better attending to their needs, and one to which they respond with increased levels of voting. However, neither of these two studies pays simultaneous attention to the intersection of gender

and race or ethnicity. They examine collective representation either in terms of gender or in terms of a racial or ethnic identity. Intersectionality theorists contend that women have multiple identities that inform political activity, and therefore, scholars cannot fully describe, study, and understand political phenomenon without addressing the multiple identities that give rise to these experiences (Crenshaw 1989 and 1991; Mansbridge and Tate 1992; Gay and Tate 1998; Hancock 2007). Indeed, there is a growing body of research that empirically investigates intersecting identities in the U.S. (Bejarano 2013; Reingold & Smith 2012; Bratton, Haynie, and Reingold 2007; McConaughy and White 2011; Cassese, Barnes, and Branton 2015), and some that attend to the international context (Hughes 2011; Hughes 2013). We are interested in intersecting identities as they relate to voting and turnout.

In terms of electoral participation, Junn (1997) finds that white women outvote black women, Latinas, and Asian American women. Other researchers have established that women of color tend to vote at higher rates than their male counterparts (Uhlaner, Cain, and Kiewiet 1989; Lien 2001; Carroll 2006; Smooth 2006; Robnett 2007; Conway 2008; Bejarano 2014;). However, Lien (1998, 2001) finds no statistically significant turnout differences between Latinos, Asian American, or Native American men and women for the 1992 and 1996 elections. There is some preliminary evidence that black female voters are more likely to vote for “one of their own” (Philpot and Walton, 2007), but this support does not seem to have a direct impact on increasing turnout, specifically. Thus, while there is some limited evidence that gender interacts with race and ethnicity in affecting participation rates and vote choice, the evidence is fragmentary when we consider how turnout is related to the intersectional representation of women and people of color.

To summarize, our concern in this study is not whether women vote for women or if minorities vote for minorities—a concept that arguably is better captured through measures of dyadic representation. Instead, we are keen on understanding the broader implications of collective descriptive

representation and whether or not collective descriptive representation has a mobilizing effect on voter participation among historically disadvantaged groups. In other words, we examine here not *who* a citizen votes for, but *if* a citizen is more likely to vote when his or her identity is better represented collectively within state legislatures. If citizens do indeed respond to collective representation, then the basic story suggests the following hypothesis:

H1: Higher percentages of collective descriptive representation will increase the likelihood of voting among individuals who shares that collective identity.

We contribute to the literature on collective descriptive representation by adding an intersectional perspective. We will be examining whether intersectionality holds, or does not, in the effects of collective descriptive representation on participation. As stated earlier, the minority empowerment literature suggests that increased descriptive representation may lead to an increase in voter turnout for both African Americans and Latinos. Do we in fact find that the intersection of gender and race or ethnicity affects the way in which collective descriptive representation influences voting participation? The intersectionality argument leads to the following addition to H1:

Because the intersection of gender with race and ethnicity produces varied political experiences and situations, intersectional collective identities will lead to varied relationships between representation and participation compared with collective identities based solely on race/ethnicity or on gender. Treating “women” as a single group is misleading. The politically relevant experiences of African American women diverge widely from those of white women, and “race” has been a defining cleavage in the U.S. for far longer than gender. However, given the gender disparities within the African American community, we suspect that African American men will be particularly responsive to seeing men of their race in power. Our expectations for Latino men versus women are less clear. We therefore propose the following elaborations of H1:

H1A: African American women will respond more to descriptive representation by race than by gender, in contrast to white women responding more to gender.

H1B: African American men will respond to descriptive representation by race but especially so to representation by African American men.

H1C: Because white non Hispanic men have been consistently overrepresented, we do not expect to see a mobilizing effect of descriptive representation for them.

Data

To address these issues, we examine turnout in the federal elections from 2000 through 2012 in conjunction with data on the composition of each state's legislature. Compared with earlier decades, there are now enough women and minorities in state legislatures to permit some comparisons to be made. These provide a good measure of collective representation.

Assessing the impact on turnout of the composition of a state's legislature requires information for each state. To establish the collective representational context in each state, we use a data set assembled by one of the authors with information on the race, ethnicity, and gender of members of each state's legislature⁸ at three time points (2000, 2005, and 2010)⁹. Note that the 2000 and 2010 data count the composition of the legislature as of the end of the year, that is, following the November election in those years, and the 2005 data count the data at the beginning of the year, following the 2004 November election. Information on the race, ethnicity, and gender of state legislators was gathered from the following sources for each of the years: Center for American Women and Politics; the National Association of Latino Elected and Appointed Officials, Education Fund; and the Joint Center for

⁸ Although the District of Columbia does have a city council, it does not have a legislature, and thus is excluded from this study.

⁹ These data were originally collected for a study of the determinants of legislature composition. The timepoints were selected because legislature composition changes slowly. Data that include both the gender and the race or ethnicity of each member are very time consuming to collect.

Political and Economic Studies; UCLA Asian American Studies Center and the Asian Pacific American Institute for Congressional Studies; and the National Council of State Legislatures (Scola 2009). State level data from the 2000 and 2010 census are also included, as is information on other aspects of state context, such as legislative professionalization (Scola 2009).

The skeptic may wonder whether there are enough state legislators of color and female state legislators, either overall or especially in the different racial and ethnic groups, to make this analysis feasible. White non Hispanic men comprised only about 37 percent of the U.S. population in 2000 and 32 percent in 2010, but almost 67 percent of state legislators in 2010. Nonetheless, there are in fact substantial numbers of female and black state legislators, as summarized in Table 1 for 2000, 2005, and 2010. Importantly for our analysis, there is also a wide range across states. There was little change across these three years. Eighty percent of states have at least some black men, or black women, or both in their legislatures. All have at least a few white women, with forty percent of the states having legislatures comprised over 20 percent of white women. Latinos are not as broadly represented, but 34 state legislatures have at least one Latino member, although only 5 have more than 8 percent.

Table 1 About Here

We must consider the state level factors that influence these differences in the numbers of women and minorities in the state legislatures. If any of these factors also affect the level of voting turnout, we must take account of them in our analysis in order to avoid the spurious conclusion that it was the legislative composition that mattered, rather than something that produced both the turnout rates and the composition. However, if we are to assess the effects of composition, we must exclude factors which affect who is elected but are not important in explaining turnout. For over three decades now, scholars have attempted to identify the key factors that may account for the variation across states in women's descriptive representation (Norrander and Wilcox, 2014; Norrander and Wilcox, 1998). Most

studies agree that it is a mix of demographic, contextual, and institutional elements. We see higher percentages of female legislators in states with larger pools of potential female candidates (Sanbonmatsu 2006; Nechemias 1987; Rule 1990 and 1999; Norrander and Wilcox 1998 and 2005; Hogan 2001; Arceneaux 2001; Camobreco and Barnello 2003), higher percentages of minority populations (Norrander and Wilcox 1998 and 2005; Arceneaux 2001; Hogan 2001), liberal political ideologies (Norrander and Wilcox 1998 and 2005; Arceneaux 2001; Camobreco and Barnello 2003), and less professional legislatures (Hill 1981; Nechemias 1987; Arceneaux 2001; Hogan 2001). There is less agreement on the reasons for variations by race, ethnicity, and gender. There is some evidence that suggests that white women and women of color legislators serve in states with distinctly different characteristics (Scola 2013). For example, states with larger recruitment pools and liberal ideologies tend to have higher percentages of white female legislators, while states with larger minority populations have more women of color in office (Scola 2013).

Some of the key factors that influence the composition of state legislatures affect voter turnout as individual resources, not as contextual factors. Education, income, and workforce participation are included in our models as individual level predictors. The level of legislative professionalization and the level of urbanization in a state are indeed contextual factor that may affect both participation (perhaps as an indicator of social capital, as Putnam (2001) argues) and legislature composition; we thus include both in our models as control variables. The participation literature, discussed below, suggests that the other state-level factors which affect the legislature's composition are not related to levels of voter turnout.¹⁰ We can safely omit other state context variables that may affect participation but not affect the legislature's composition, such as the intensity of a presidential campaign in a given year, without

¹⁰ We did nonetheless consider various specifications including these variables, all of which remained resoundingly insignificant. Note that since there are only fifty states, models cannot include many state level variables simultaneously before running into collinearity issues.

biasing our analysis of the effects of collective legislature composition on turnout. Because the percent of the state's population which is non-white has a strong effect on the number of nonwhite legislators, while it has at best an unclear effect on turnout of individuals, we do not include it in the analysis. Were we to do so, it would absorb a significant portion of the effect of the legislature's composition precisely because it strongly affects who gets elected.

Survey data allows us to examine turnout separately for population subgroups defined by gender and race or ethnicity and thus to assess our hypotheses about variations in the propensity to vote. A very large sample is needed to obtain meaningful numbers of these subgroups in each state. The November sample of the Current Population Survey (CPS), the Voting and Registration supplement, comes closest to meeting these requirements, and we use the November CPS from 2000, 2002, 2004, 2006, 2008, 2010, and 2012 for turnout information.¹¹ Caution is required, however. Despite the large CPS sample – in 2004, about 97,000 voting age citizens in the November supplement – the sampling frame is not designed to provide a random sample of each state, although scholars frequently, inappropriately, use these data to report state estimates. More problematically, subdividing by race or ethnicity and gender leads to very small numbers of respondents for some categories in some states, too small to provide believable estimates of turnout. In some states, there are fewer than twenty respondents of a given race and gender.¹² We thus cannot derive reliable turnout estimates for a given state nor do a reliable state level analysis. However, these small numbers do permit estimates of the voting behavior of individuals with certain characteristics, including residing in a state with certain characteristics along a continuum. While the sample may not be representative of, say, black women in Hawaii, it is representative of black

11 These data were obtained from Unicon Research Corporation, which provides an easier interface and more consistent coding than the U.S. Census Bureau. In January 2015, Unicon transferred access to cps.ipums.org at the Minnesota Population Center, from which the data can now be obtained.

12 The Census publications often report numbers weighted up to the state population which suggest substantially more actual respondents than the file contains.

women who live in states with more or fewer black legislators.

Even with this large sample, very few states had more than a few Asian American-Pacific Islander respondents. The analysis is thus conducted only for African American, Latino, and non-Hispanic white respondents. Because the legislator data did not distinguish among Latinos by national origin, we reluctantly kept this as a combined group, despite the known substantial political differences among Latinos (notably between Cuban Americans and Mexican Americans and Puerto Ricans).

Turnout rates do vary for men and women of different races and ethnicity, as shown in Table 2. We use the CPS data to calculate the proportion of citizens¹³ age 18 or over in each group who reported that they voted in the election, excluding the District of Columbia. Within each racial or ethnic group, women vote at higher rates than men in each presidential election year. In the off-years, that gender gap disappears for white non Hispanics and is small for Latinos. But even in the off-years, African American women vote at higher rates than African American men. Through 2010, non Hispanic white women have the highest reported turnout rates. In 2008, African American women surpassed non Hispanic white men as the group with the second highest turnout rate, and then in 2012, they were the group most likely to report voting. And in 2012, African American men reported voting at rates higher than non Hispanic white men. These elections thus present varied contexts against which to test the effect of state legislature context.

Table 2 About Here

Accounting for Individual Differences in Turnout

As explained above, in order to assess whether collective descriptive representation in the legislature influences the propensity to vote, we need to control for other reasons why some individuals

¹³ Voting rates for Latinos are especially distorted unless the denominator includes only the citizen population. McDonald and Popkin (2001) argue that the denominator should be further adjusted to account for additional sources of ineligibility, such as felony convictions, but these adjustments are beyond the information available from the CPS.

vote more than others, especially as the distribution of these characteristics varies across ethnic and gender groups and across states. The CPS contains information on demographic variables which substantial previous research has found to be consistently related to political participation (Verba, Schlozman, Brady, 1995). Although the CPS has no questions assessing attitudes, the demographic variables, taken together, provide a reasonable baseline against which to examine variations by race, ethnicity, and gender and the effects of contextual factors on participation.

The CPS data allow us to take account of the following individual level correlates of vote turnout. The positive relationship between income and education and participation is one of the best-established results in the participation literature. They directly provide resources useful for politics and are highly correlated with other resources and attitudes which increase activity (Verba, Schlozman, Brady, 1995, pp. 313-320). Homeownership and being unemployed provide further indicators of economic resources, especially useful for dealing with the large number of respondents who decline to provide a figure for family income. In addition, homeownership is also associated with participation due to the positive effects of community ties on activity. Similarly, married people are more participatory than those who are not.¹⁴ People not in the labor force are a mixed group, including the long-term unemployed who have given up looking for work, the retired, students, and hometenders, among others, but need to be distinguished from those who do have a job. Finally, union membership also increases electoral participation through several pathways (Verba, Schlozman, Brady, 1995, 384-388). Since many of the above variables differ across racial and ethnic and gender groups, it is possible that they account for any observed difference in turnout; hence we need to control for them in order to assess the effect of the legislature's composition.

¹⁴ Wolfinger and Wolfinger (2006) have shown that voting rates vary substantially among the different types of unmarried, for example with the widowed being more likely to vote than the divorced. We do not make these further distinctions here as the difference between the married and others holds, and is more widely supported by other data than the differences among the types of unmarried.

We also control for two additional aspects of context which vary across states, as discussed above. One which we consider is the distinction between more rural and more urbanized states, captured by census figures for percent of the population that is urban, as an indirect way of measuring the social capital context.¹⁵ Second, we include the degree of professionalization of the state legislature. We think this captures some relevant aspects of the political climate within a state in a directly observable measure.

Keep in mind that in all cases we are looking at the effect of a state's legislature's composition on an individual's propensity to vote. That somewhat reduces the endogeneity issue introduced in our discussion of the minority empowerment literature above. Even if in some specific district a white woman, for example, won election because of mobilization of white women—that is if the causality went from turnout to representation in that district—those voters would just be a portion of the white women voters in the state, and we argue that that particular white female representative contributes to the collective descriptive representation of all white women in the state. Although the problem is not eliminated, as mobilization could precede representation for an entire state, our focus on collective instead of dyadic representation diminishes the endogeneity concern slightly. Examining candidates instead of elected officials would not solve the endogeneity problem either, as turnout in a district could as easily affect a person's decision to run as affect her chances of winning. Finally, using legislature composition from earlier timepoints could theoretically address the issue; if the composition precedes the turnout, then the causality is more likely to flow from representative to voter. Indeed we get essentially the same results when using legislature composition from five years earlier (in model estimations not reported here). However, the slow change in legislative composition makes this a weak test. Even more seriously, it does not dispose of the challenge, as turnout patterns could be persistent

¹⁵ Putnam (2001) reported higher social capital in less urban areas, and social capital is associated with greater political participation, all else equal.

and have produced the earlier legislature. We thus can be more assertive about correlation than causation, and as with most things we suspect the arrow runs in both directions, but we do think the causal direction we hypothesize is important.

Results

We examine turnout in four presidential elections, 2000, 2004, 2008, and 2012 and three off-year elections, 2002, 2006, and 2010. If our hypotheses are correct, we should observe that the higher the percentage of state legislators from the group, the more likely the individual is to vote. Because presidential elections receive so much more publicity than off-year elections, national waves may be more likely to overwhelm the effects of state context in presidential years than in the off-year races. The latter are also more likely to focus on state politics without the distraction of a presidential race and thus make the state legislature more salient. We thus pay attention to the two types of races.¹⁶

As noted above, we use the Current Population Survey for the individual level data. Our estimations take as the dependent variable whether or not the respondent reported that he or she voted, coded 0 for nonvoters and 1 for voters. We only consider individuals who are citizens of voting age (18 or over), and include those who were not registered. Thus, these estimations correspond to turnout as the percent of the eligible, not as the percent of the registered. Since the dependent variable is binary, logit is an appropriate method of estimation. However, these data are also grouped into two levels, the state and the individual. Individuals within a state are not independent of each other; they have the same values for the state level variables, such as the composition of the legislature and the percent urban population. In order to obtain appropriate error estimates, we thus use a multi-level modeling technique.¹⁷ The key explanatory variables of interest interact the percentage of the state's legislators

¹⁶ We thank an anonymous reviewer for making this point to us about off-year versus presidential year elections.

¹⁷ We use the xtlogit procedure in Stata so as to be able to calculate probabilities and changes in probabilities. The xtmelogit procedure is technically more appropriate; in fact the basic model for each

from various ethnic or racial groups, by gender, with the respondent's gender and race or ethnicity. If our hypothesis that collective descriptive representation increases turnout is correct, these variables should have significant positive coefficients in estimations with vote (versus abstain) as the dependent variable. In addition, the independent variables include both constituent variables of these interactions. Including in the model the percentage of the state's legislators from various racial or ethnic groups, male or female, assures that the interactions are not misleadingly picking up a contextual effect from the composition of the legislature that applies to all respondents. The models also include the individual's gender and race or ethnicity. These individual level variables are known to affect turnout; excluding them would bias the estimates of the interaction terms.

The remaining variables are included in the models because, as discussed above, they are likely to affect an individual's proclivity to vote. If they are omitted we may misestimate the effects of the legislative context. Details of their coding are in Appendix A. In brief, education is coded with years of schooling, income with family income in thousands with a dummy variable included for respondents who refused to answer¹⁸, age is coded in years, and other individual level variables – union member, homeowner, unemployed, not in labor force, married, foreign born – are coded 1 for those who have the characteristic and 0 otherwise. The CPS race variables were used to code respondents as African American, the Hispanic variables to code them as Latino, and the two together to code them as non-Hispanic white. Note that some respondents (under a fraction of a percent) are coded both as Latino and as African American. The race coding was straightforward for 2000 and 2002 but complex for 2004

year was first estimated with `xtmelogit`, and there was little to no difference in the estimation results, both via the intraocular test and using Stata's recommended test.

18 Just under 20 percent of citizens of voting age refused to answer the income question; they are coded as "0" on the regular income variable and "1" on the dummy. The 2010 and 2012 data came from Unicon with imputed income values for persons who refused to answer, and thus no one is missing on income in those years, and the dummy for missing income is omitted.

onwards since CPS respondents were able to pick multiple categories. We include dummy variables that took on the value 1, respectively, for non-Hispanic white women, Latino men, Latino women, black men, black women, and people of other races (mainly Asian Americans but also native Americans and some combinations not otherwise classified from 2004 onwards). See Appendix A for the specific coding we implemented.

By estimating a model which includes all eligible respondents, we are able to compare directly the turnout of each gender and racial or ethnic group, after taking account of the other independent variables. We left white men as the excluded, reference category. A significant positive (negative) coefficient for another group means that its members participate more (less) than white males after taking account of everything else. However, our primary interest is whether there is a significant positive coefficient on the interaction term comprised of a person's race or ethnicity and gender with a measure of the legislature's composition; if there is, then the probability of voting increases for people of that race or ethnicity and gender when the legislature has more representatives of the indicated type. If our hypotheses are correct, we should observe that the higher the percentage of state legislators from one of the underrepresented groups, the more likely the individual is to vote. Specifically, we would see that in an estimation with vote (versus abstain) as the dependent variable, and with the percentage of state legislators from the specific group as an independent variable, the coefficient on that percentage is significant and positive. Non Hispanic white men present an exception. As we suggest in H1C, we expect that because of the historic overrepresentation of non Hispanic white men, their turnout rates will not increase where there are even more of them in the legislature.

Table 3 About Here

Table 3a shows the key results of the basic multi-level logit estimations for the presidential elections 2000, 2004, 2008, and 2012, and Table 3b has the key results for the off-year elections 2002,

2006, and 2010. We include here the independent variables that involve race, ethnicity, and gender, both at the individual and at the state level. (The full estimation results are included in Appendix B.) The overall fit of each model is good (Wald χ^2 significant, at .000). The interaction terms, listed first among the independent variables in the table, provide our test of the hypotheses on the effects of descriptive representation.

Before discussing these results, we briefly address the control variables, omitted here but contained in the Appendix B tables. The individual level demographic variables are reassuringly significant in the usual ways. Individuals are more likely to vote if they are older, better educated, have higher family income, are union members, own a home, are married, were born in the U.S., and are employed (as the unemployed and those not in the labor force are less likely to vote). (People who did not report family income are less likely to vote in presidential years, more likely in the off years, but we include this variable mainly to avoid distorting the income measure.). Even when we vary the model, as discussed in later sections, these robust results for the demographic control factors remain essentially unchanged. The state context control variables are less consistent. Persons living in states with a higher percentage of urban residents turn out at lower rates through 2008 after which there is no significant impact. In states with a more professional legislature persons tend to be more likely to vote, but not significantly so in either 2002 or 2012, and with variable effect when we alter the model. Our main concern with all of these variables, however, is just to avoid inappropriately attributing turnout effects to the composition of the state legislature.

The core results concern race, ethnicity, and gender and the effect of descriptive representation. We include in the model the percentage of legislators of different race/ethnicity gender in the respondent's state; these variables capture the effects for everyone in a state of differences in legislature context. Most of these terms are resoundingly insignificant. We will discuss the exceptions below. We

also include in the model a dummy variable for each group, listed in the second block. These indicate whether on average people of that gender and race or ethnicity vote more or less or at about the same rate as white men, after controlling for everything else. When these are significant, they shift the intercept. The consistently positive terms for African American women indicate that once we take account of the demographics and other factors in the model, they vote at higher rates than white men, while people of other races and, in most years, Latino men turnout at lower rates. However, our primary concern is not to compare the turnout rates of men and women of different races and ethnicities. Instead our question is whether collective descriptive representation pushes the probability of voting above or below what these other variables would predict, and that effect is captured in the interaction terms, listed first in the table. When these terms are significantly positive, they indicate that people of that race or ethnicity and gender are more likely to vote when their state has more legislators who are demographically like them, all else equal. Significantly negative interaction terms indicate that they are less likely to vote where they have more collective descriptive representation, again after taking account of everything else.

The results partially support our hypotheses, but with complexity. We consider the presidential years first. Across all elections, the percentage of Latino legislators resoundingly does not significantly affect Latino turnout, whether men and women are separated by gender, as reported here, or combined (in other estimations not reported here).¹⁹ In contrast, turnout is higher for African American men when there are more African American men in the legislature, consistent with H1B. African American women present a less consistent picture; their turnout clearly increases when there are more black women in the legislature in 2000 and 2012, but only barely significantly so in 2008 and not at all in 2004; H1A has only qualified support for now. Non Hispanic whites present further inconsistencies. Non Hispanic

¹⁹ Perhaps the states with no Latino legislators swamp the results, but there is still no effect when we estimate alternative models that consider only states with at least some Latino representatives.

white women are more likely to vote in 2000 and 2004 as the percentage of state legislators who are white women increases, but not in 2008 and 2012. However, white women are more likely to vote in all states in 2008, and everyone in the sample is more likely to vote in those last two elections if they live in a state with more white females in the legislature. There is an overall context effect, but not an additional contextual boost for white women. In 2000 and 2004, as H1C proposes, descriptive representation makes no difference for the turnout of white men. However, in 2008, white men were more likely to vote in states with more white men in the legislature – and therefore fewer women and minorities. Perhaps as Donovan (2010) asserts, the “racial threat” of Obama’s candidacy explains this increase in white male turnout in 2008. In 2012, when Obama was the sitting president running for reelection, white men in those states had the opposite response, and were more likely to abstain. These results hint at the idea of a counter-mobilization effect for non Hispanic white males when they see descriptive representation increase among disadvantaged groups—at least in the short term, as the 2008 reaction seems to fade by the 2012 election. Nonetheless, even in presidential years, where there is substantial national attention to elections, we see some effects of collective descriptive representation. The patterns also suggest responsiveness to cues triggered by Obama’s candidacy and presidency.

Off year elections always have lower turnout and typically local and state races are more prominent than in presidential years. In both 2002 and 2006, better representation in a state legislature increases turnout for members of most of the underrepresented groups. The impact is clear for Latinos in 2002, but borderline for these men in 2006. For African American men it is insignificant in 2002 (but not wildly so with a p value of .14), and robust in 2006. Note, thus, that coethnic representation does matter for Latinas and for Latinos in these less visible elections, echoing the findings for local races. At the same time descriptive representation has no effect for white non Hispanic men, consistent with H1C. The pattern changes somewhat in 2010. Neither white women, Latinos, nor Latinas turnout more in that

election where they have better representation. And consistent with their behavior in 2012, but not 2002 and 2006, the turnout rate of white men is depressed in states where they comprise more of the legislature. However, in 2010 collective representation continues to matter for both African American men and women; they turnout more where there are more legislators who share their race and gender. We note that in all three off-year elections, there is an additional significant legislature context effect for everyone. Everyone is less likely to vote in states where there are more African Americans in the legislature. The point is that this overall negative effect is mitigated for African American men and overcome for African American women, who do indeed turnout more when represented by someone like them.

Perhaps Gender is All that Matters

We next consider whether women might be responding simply to the proportions of women in the legislature, irrespective of their race or ethnicity. Does intersectionality matter for the impact of descriptive representation on turnout, or is gender a sufficient cue for women? The mixed results for the interactive terms for each group of women suggest investigating whether gender descriptive representation provides more power than gender combined with race or ethnicity. Are women more likely to vote when there are more women, of whatever racial or ethnic group, in their state legislature? As stated in H1A, we suspect that gender will matter relatively more for non Hispanic white women than for African American women. We explored this by estimating models similar to those reported in Table 3 except with a change in the interaction terms for women. (The key coefficients are reported in Appendix B Tables 6a and 6b.) In these models we formed separate interaction terms for white women, African American women, and Latinas with the total proportion of women in the legislature (whatever the legislator's race or ethnicity).

Non Hispanic white women are indeed more likely to vote in states where there are more

women in the legislature in the 2000 through 2006 elections, the same elections in which we just saw that they voted more where the percentage of *white* female legislators was higher. Of course white women make up a substantial fraction of women legislators. More interesting are the results for 2012, when we found white women no more likely to vote than anyone else as the percentage of white female legislators increased. We find that in 2012 their probability of voting did increase in states with more female legislators, whatever these women's race or ethnicity. Gender trumped race for white women in 2012. The situation is quite different for Latinas and African American women. Neither group was significantly more likely to vote in any year in states with more women in the legislature. Indeed, in the elections from 2004 through 2008 and 2012, African American women were significantly less likely to vote in states with more women legislators, even though in most of those years collective representation by women of their race increased their turnout. The turnout increases for African American women do not stem from gender representation alone; in fact gender representation decreased their participation. These results are consistent with Hypothesis H1A, that gender descriptive representation will matter more for white women than for African American women, and that race matters for African American women. These results leave open the question whether race and gender matter more than race alone.

Perhaps Race Trumps Gender

We ask next whether the fairly consistent increases in turnout for African Americans in states where they have more representatives of their race and gender does indeed reflect both of those characteristics. Does intersectionality matter for the impact of descriptive representation on turnout or is race a sufficient cue for African Americans? One way to determine whether race or gender and race matters would be to include variables for the proportion of black legislators and also for the proportion of black legislators of a particular gender. However, since the latter is a component of the former there is too much collinearity in those estimations. We follow a similar strategy as with the gender question.

We reestimate the models reported in Table 3 except with a change in the interaction terms for African Americans. (The key coefficients are again reported in Appendix B, in Tables 7a and 7b.)

In these models we created interaction terms for African American men and African American women with the total proportion of African Americans in the legislature, regardless of gender. In every year except 2002, when there is no effect for the men, both African American men and African American women are more likely to vote in states with more African Americans in the state legislature. Note that this result holds for African American women even for those elections when increased intersectional representation had no effect on their turnout, namely 2004 and arguably 2008. These results mean that collective representation by legislators of shared race but different gender was enough to increase their activity in those years. We tracked that possibility a bit further by estimating a new set of models which explicitly included cross-gender interactions, that is, the percent of African American male legislators for African American women and the percent of African American female legislators for the men. (The key coefficients are again reported in Appendix B, in Tables 8a and 8b.) Indeed, for African American women, the presence of African American male legislators increased their turnout in every election from 2002 on, even in 2004 and 2008 when the presence of female African American legislators had no or borderline effect.²⁰ Similarly, African American men were more likely to vote in each election in states with more African American women in the legislature, except in 2002. Race is thus powerful for African Americans.

We conducted a similar analysis for Latinos for the two elections, 2002 and 2006, in which there was any, even borderline, significant effect from intersectional representation. We reran those models interacting Latinas and Latinos with the total number of Latina/os in the state legislatures (and report the

²⁰ The obvious difference between 2008, 2010 and 2012 and the earlier years is the candidacy and then presidency of an African American. In models not reported here, we introduced a control for Obama's share of the vote in each state, but this did not materially alter any of the results.

key results Appendix B Table 7c). The propensity to vote both of the men and of the women increased significantly where there were more Latinos in total in the legislature. As with the African American results, we can thus see a clear effect of ethnicity but not a clear indication of whether the combination of ethnicity and gender is more powerful than race or ethnicity alone.

How Much Does Descriptive Representation Change Turnout?

The above analyses show that collective descriptive representation increases voter participation for white women and African Americans and in the earlier off-year elections for Latinos. Table 4 summarizes the elections and models in which turnout increases when the legislature contains more members from men or women from a particular racial or ethnic group. We leave the entry blank if there was no significant effect from the interaction term. “Yes” indicates that the interaction term was positive and significant; “-Neg” that it was significant and negative. The table summarizes the importance of race for African Americans, of gender for white females, and of the difference between presidential and off-years for Latinos.

Table 4 about Here

The magnitude of the impact of collective representation on turnout is unclear, however. Logit coefficients relate nonlinearly to changes in the dependent variable, and the interactions greatly complicate interpretation. For example, the predicted turnout of an African American woman depends not just on the interaction term with the percent of African American women in the legislature but also on the two component terms, and hence on all three of those coefficients, but their joint effect will also vary depending upon that person’s values on the other variables in the model. Thus, in order to get a sense of how much the composition of the legislature affects turnout, we calculated changes in the predicted probability of voting for those groups and years where the interaction term was statistically significant. This approach will provide some insight as to when the combination of gender with race or

ethnicity matters.

We use the models reported in Table 3 and in the appendix to simulate, first, what the probability of voting would be for each respondent were his or her state to have the minimum observed percentage of state legislators of a given type, and then, second, what that probability would be if his or her state had the maximum observed percentage. For both calculations, each respondent retains his or her actual values (not the means) on all the other variables. We then calculate the difference between these probabilities and find the average difference across respondents. That gives us a value for the expected change in turnout for members of that group when the percentage of relevant state legislators moves from its observed minimum to its observed maximum value. That change will affect turnout both through the interaction term and through whatever relationship it has with turnout for everyone in the state.

These estimated changes in the probability of voting are reported in Table 5, with presidential election years in the first set of columns followed by the off-year elections. Row I under each group refers to the model reported in Table 3. Row Ib for African Americans reports results from the model where they were interacted with the legislators from the other gender, same race. Row II refers to the model where women were interacted with the total number of female legislators. Row III reports results for the models where the interaction was with the total number of African American legislators or with the total number of Latino legislators.

Table 5 About Here

The turnout changes can be substantial. To give context to these numbers, recall the mean turnout of each group, reported above in Table 2. For white women, the models predict that when changes in white women in the legislature increase turnout it is by 5 to 7 percent over the maximum range in presidential years, and 2 to 5 percent over the range in off-years. The effect of gender alone is

the same or greater in the presidential years, 12 points in 2012, but somewhat less in the off-years. This suggests that gender representation is about as powerful for white women as the intersection of race and gender, consistent with our hypothesis H1A.

For African Americans, the effects are even larger. Average turnout often changes ten points or more from minimum to maximum levels of legislative representation. The relative magnitudes help to untangle how gender interacts with race. When the interaction with the proportion in the legislature of one gender is significant while the interaction term with the legislative proportion of the other gender is insignificant, it is straightforward that it is the former change in legislative composition which affects turnout. When multiple interaction terms are significant, we conclude that one gender is driving the result when the probability of turnout increases more for changes in one gender than for changes in the total. Conversely if the change is higher when considering the total, then both genders contribute to the result. Comparison of the changes in probabilities for African American women suggests that in 2000, 2002, and 2006 what mattered most was representation by black women, while in 2004, 2008, and 2010 representation by black men mattered more. In 2012 the gender of the legislators appears to have been irrelevant for the turnout of African American women, while race did matter. In contrast, for African American men, the representation by males dominated in 2000, 2008, 2010, and 2012 while representation by women mattered more in 2002 and 2006. H1B thus has limited support. The gender of co-racial representatives was irrelevant for the turnout of African American men in 2004 and 2012.

Among Latinos, there is little difference between men and women in 2002; for both, intersectional representation produces a very modest increase in turnout, while the overall negative contextual effect overwhelms coethnic representation. In 2012 however both men and women gain almost 3 points in turnout from co-ethnic representation. Of more interest, we find a much larger 12 point jump in the turnout of Latinas when their intersectional representation increases from minimum to

maximum. As we hypothesized, intersectionality matters; there are differences between people of one gender but different races and people of the same race but different genders.

Conclusions

Does collective descriptive representation affect the probability of voting? We answer a contingent “yes” to this question. Despite some inconsistencies in the results, our overall findings confirm previous research on the effect of collective descriptive representation on voter turnout (Rocha et al 2010; Atkeson and Carrillo 2007): higher levels of collective descriptive representation in the state legislature partially accounts for higher levels of voter turnout among previously excluded groups. In other words and generally speaking, the higher the percentage of women and legislators of color there are in office, the higher the likelihood of someone who shares these characteristics will vote.

Nonetheless, it is not as simple as descriptive representatives collectively creating the potentiality for responsiveness based on only one or another descriptive characteristic. As we hypothesized, intersectionality matters. Indeed, the story becomes more complicated when we take intersecting identities into account. Thus, while the current study provides compelling results for the positive effect of a legislator’s gender, race, or ethnicity on voter participation, it also importantly established the significance for the intersecting effects of these identities. White males do not appear to respond to collective descriptive representation. The one exception is 2008, where a black male presidential candidate signaled a “racial threat” to which they responded. On the other hand, in most years, non-Hispanic white women are more likely to vote where there are more women in office, overall, and also where there are more white non-Hispanic women in office, specifically, indicating more of a gendered cue.

However, gender was not a universal cue, as African American women were not more participatory where there were more women representatives. Instead, for black women, higher

percentage of women legislators (both white and of color, combined) actually *decreases* their likelihood of voting, while higher percentages of black legislators (both men and women, combined) *increases* their chances of voting, indicating more of a racial cue. In short, for black women, race trumps gender.

African American men present a similar picture, with both intersectional and collective race representation at play; in each year they voted at higher rates in states where more black males were in the legislature and also where more black females were in the legislature. The data hint that the relative impact of the intersectional representation by black males may have been stronger in 2008 and 2012, which of course were the elections which featured a high profile black male candidate. In short, these results clearly indicate that African American turnout increases with collective descriptive representation by race.

At the same time, we found no collective ethnic effect on voter turnout for Latinos in any of the presidential election years, for either men or women, in contrast to studies which do find increases in response to local co-ethnic representation. During the off-year elections, Latinos responded to higher levels of collective ethnic representation in 2002 and 2006: Both Latino men and women were more likely to show up at the polls when there were more Latinos in the state legislature, regardless of gender. In these same years, the intersection of ethnicity and gender mattered as well: Latino men voted at higher rates in states where there were more Latino male legislators, and Latinas voted at higher rates in states where there were more Latinas. We did not find any evidence of Latinas voting at higher rates in states with higher percentages of women (all races and ethnicities combined). We suspect our result for Latinos is at least partly an artifact of the available data, of the aggregation across national origin groups, and of the relatively few states with significant Latino collective representation.

Thus, some puzzles remain. Most notably, why does the intersection of race and gender affect each of the groups so differently over these seven election cycles? Our results are consistent with

shifting salience for race and gender but leave open the question of when and why these shifts occur. Second, we have offered some speculation as to why our results for Latinos and Latinas differ from those of other scholars, but we wonder whether the reasons are primarily artifactual or, instead, have a basis in real differences between collective state level and local representation. And, third, this study underscores the complex nature of assessing collective descriptive representative. What it means for a representative to “look like” a constituent varies, and different characteristics interact. Individuals assess for themselves what characteristics of a representative best signal common interests, and that assessment clearly varies with context. As in other spheres, so too in voter turnout—both race/ethnicity and gender give rise to distinctive patterns of political activity, but neither alone are sufficient to characterize political behavior.

Despite the puzzles, our results strongly suggest that the intersection of identities matters, not only in terms of who votes, but also in how collective descriptive representation influences voting participation. Our study confirms what other women and politics and race and ethnic politics scholars have documented: gender affinity increases turnout among women, racial or ethnic affinity increases turnout among co-racial and co-ethnic voters. What we add to this conversation is that it is not “only” race, ethnicity, or gender affecting turnout, but that the intersection of these identities, both among the electorate and within our legislative institutions, have a predictable effect on voting behavior.

While we cannot empirically assess exactly how this process works, we see several possibilities for the mechanisms by which descriptive representation increases voter participation. Psychological attitudes associated with participation, such as efficacy and engagement, increase when people who have been historically politically marginalized see someone “like them” in a position of power and thus someone who is able to respond to protect their interests. The presence of the descriptive representatives may also strengthen a norm of participation, as politics becomes perceived as appropriate for people like

oneself. Finally, descriptive representatives may be effective recruiters, partly because they are likely to have linkages with citizens “like them” and partly because people who feel represented by them are likely to respond to recruitment.

The larger implications of our finding speak to the importance of increasing and advocating for more diverse representative institutions. The idea that the collective identity of a legislature positively impacts voter participation is a powerful challenge to the representational status quo. Being collectively descriptively represented likely increases engagement and recruitment among historically disadvantaged groups as well. When underrepresented groups “see” themselves mirrored within our legislative institutions, they seem to respond to that collective representation with higher participation rates.

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APPENDIX A – Variable Definitions

Race and Ethnicity

2000 CPS:

Race categories are taken from:

“ I am going to read a list of race categories. “What is (name’s/your) race? Probe: Are you White, Black, American Indian, Aleut or Eskimo, Asian or Pacific Islander, or something else?”

These are then combined and reported as four categories: White, Black, American Indian or Alaskan Native, and Asian/Pacific Islander.

Hispanic is derived by the Census from responses to “What is your origin or descent?”

2004 and 2008 CPS:

Persons who answer “yes” to “Are you Spanish, Hispanic or Latino?” are coded as Latino.

Other ethnic and racial categories come from answers to this later question in the survey:

“Please choose one or more races that you consider yourself to be.” [Respondents are shown a flash card with CHOOSE ONE OR MORE White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander]

The numbers which follow are based on voting age citizens (the eligible) only. Although most individuals (98.7% in 2004, 98.5% in 2008) chose a single category, several hundred selected black plus something else. Given the relatively few black respondents in some states, we were loathe to lose them to missing data. We thus included in the “black” category the 124 in 2004, 203 in 2008 who selected white and black, the 94 in 2004, 62 in 2008 who selected black and American Indian, and the 38 in 2004, 41 in 2008 who selected white, black, and American Indian. Specifically, in terms of the CPS codes, we treated as “black” individuals with codes of 2, 6, 10, and 15 on race. Other mixed combinations, including those with no races specified, were treated as missing.

For all years: Those coded as Hispanic by the Census are coded here as Latino, whatever their race.

Non Hispanic white includes those coded as white on race and not Hispanic.

Some (about 100 in 2000 and 2004, 200 in 2008) individuals are coded both as Black and as Hispanic.

Foreign Born

Respondents were coded as foreign born (“1”) if they were foreign born, U.S. citizen by naturalization or not a citizen of the United States. They were coded “0” if they were born in the U.S., or in Puerto Rico or U.S. outlying area, or born abroad of American parent or parents.

Union Membership

Respondents were coded as union members if they answered affirmatively either of the following questions, asked of those who were working:

“On this job, are you a member of a labor union or of an employee association similar to a union?”

“On this job, are you covered by a union or employees association contract?”

Education

Educational attainment (highest level of school completed or highest degree received) was recoded to something approximating years of schooling instead of the original scale that went from 31 to 46 for those with any schooling. The recoded scale is coded as follows:

0 no school

1 less than first grade

4 1-4 grade

6 5-6 grade

8 7-8 grade

9 9th grade

10 10th grade

11 11th grade

12 12th grade no diploma

13 high school graduate

14 some college but no degree/ associate's degree either vocational or academic

16 college bachelor's degree

18 master's degree, including MBA

20 professional school degree or doctorate

Family income

Family income was recoded to the midpoint of the categories in thousands of dollars, with the end categories (under \$5000 and \$150,000 and over) coded at the end point. The values thus range from 5 to 150 (instead of the original 1 to 16). Respondents who were missing on this question (16.7% of the eligible in 2000, 17.9% in 2004, and 19.5% in 2008) were coded as "0" on family income and as "1" on a dummy variable for "missing income". Respondents who did report family income were coded as "0" on the "missing income" dummy variable.

Table 1: Presence of Female, Black, and Latino Legislators in State Legislatures**A. In 2000**

Percent of members of the state legislature who are:	Number of states with percentage of specified type of legislator in the range:				Percents for specified type of legislator:		
	Exactly 0%	>0 - 8%	>8 – 20%	>20%	min	max	mean
Women	0	1	19	30	7.9%	40.8%	22.5%
White Women	0	4	26	20	2.6%	36.7%	18.7%
Black	9	22	15	4	0.0%	25.9%	7.2%
Black Men	12	26	10	2	0.0%	20.7%	5.0%
Black Women	14	36	0	0	0.0%	7.2%	2.2%
Latino	22	22	5	1	0.0%	36.6%	2.9%
Latino Men	26	19	4	1	0.0%	28.6%	2.1%
Latino Women	32	17	1	0	0.0%	8.3%	0.8%

B. In 2005

Percent of members of the state legislature who are:	Number of states with percentage of specified type of legislator in the range:				Percents for specified type of legislator:		
	Exactly 0%	>0 - 8%	>8 – 20%	>20%	min	max	mean
Women	0	0	22	28	8.2%	35.6%	22.7%
White Women	0	4	27	19	2.9%	33.3%	17.9%
Black	6	25	14	5	0.0%	27.0%	7.7%
Black Men	11	26	12	1	0.0%	21.3%	4.8%
Black Women	10	38	2	0	0.0%	10.1%	3.0%
Latino	16	29	3	2	0.0%	39.3%	3.5%
Latino Men	20	25	4	1	0.0%	26.8%	2.4%
Latino Women	31	17	2	0	0.0%	12.5%	1.1%

C. In 2010

Percent of members of the state legislature who are:	Number of states with percentage of specified type of legislator in the range:				Percents for specified type of legislator:		
	Exactl y 0%	>0 - 8%	>8 – 20%	>20%	min	max	mean
Women	0	0	1	36	10.0%	38.0%	24.2%
White Women	0	5	27	18	5.7%	36.7%	19.1%
Black	9	21	15	5	0.0%	28.7%	8.0%
Black Men	14	24	11	1	0.0%	21.3%	4.9%
Black Women	12	36	2	0	0.0%	11.2%	3.1%
Latino	17	27	3	3	0.0%	43.8%	3.6%
Latino Men	21	25	3	1	0.0%	31.3%	2.5%
Latino Women	28	21	1	0	0.0%	12.5%	1.1%

**Table 2: Average Turnout by Gender and Racial/Ethnic Groups
in elections from 2000 through 2012 from Current Population Survey
Average proportion reporting that they voted among citizens 18 years and older
(excluding District of Columbia)**

	White Men	Black Men	Latino Men	White Women	Black Women	Latinas
National Average 2000	61.2%	53.1%	43.0%	64.0%	60.1%	46.3%
National Average 2002	55.8%	47.1%	35.7%	55.8%	53.1%	35.9%
National Average 2004	66.3%	54.8%	45.3%	69.5%	63.1%	50.0%
National Average 2006	58.5%	48.6%	36.7%	59.5%	53.5%	39.2%
National Average 2008	64.7%	60.5%	46.9%	68.9%	68.2%	52.0%
National Average 2010	58.7%	52.2%	36.0%	58.9%	57.2%	39.1%
National Average 2012	72.0%	72.4%	53.7%	74.9%	82.3%	58.5%

**Table 3a: Vote versus Abstention for Voting Age Citizens, for presidential elections
2000, 2004, 2008, and 2012
(xtlogit coefficients and 2-tail significance)**

Variables	2000		2004		2008		2012	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature								
White ^a female x % Wht Fem Leg ^c	0.63	0.012	0.82	0.000	0.07	0.767	0.31	0.227
White male x % Wht Male Leg	-0.08	0.615	-0.05	0.703	0.26	0.006	-0.38	0.010
Black female x %Black Fem Leg	6.96	0.000	0.87	0.514	2.29	0.099	8.65	0.000
Black male x %Black Male Leg	3.83	0.000	3.40	0.000	2.96	0.000	3.33	0.000
Latino female x % Latino Fem Leg	1.27	0.545	-0.81	0.417	-0.38	0.689	0.68	0.616
Latino male x % Latino Male Leg	-0.74	0.408	0.60	0.317	-0.20	0.697	0.73	0.202
White female	0.01	0.907	0.02	0.819	0.26	0.000	-0.14	0.225
Black female	0.31	0.017	0.46	0.000	0.71	0.000	0.71	0.000
Black male	-0.15	0.269	-0.22	0.042	0.30	0.002	0.20	0.105
Latino female	0.07	0.494	0.08	0.451	0.19	0.011	0.00	0.992
Latino male	-0.04	0.581	-0.30	0.006	-0.14	0.007	-0.29	0.013
Other race ^b	-0.47	0.000	-0.48	0.000	-0.24	0.000	-0.52	0.000
%White female legislators	0.16	0.729	0.39	0.348	0.88	0.028	1.70	0.001
% White male legislators	0.39	0.238	0.39	0.199	0.01	0.986	0.24	0.464
% Black female legislators	-0.49	0.823	-0.29	0.841	-0.68	0.630	-0.72	0.664
% Black male legislators	-0.86	0.316	-1.15	0.135	0.74	0.324	1.29	0.140
% Latino female legislators	-2.17	0.541	-1.25	0.606	0.51	0.826	-0.45	0.890
% Latino male legislators	0.56	0.645	1.00	0.413	-0.17	0.884	0.03	0.981
Constant	-4.58	0.000	-4.21	0.000	-3.96	0.000	-5.45	0.000
TEST STATISTICS		S.E.		S.E.		S.E.		S.E.
rho	0.01	.002	0.01	.002	0.01	.002	.015	.003
Likelihood ratio test of rho=0	Chibar2=329.9 p=.000		Chibar2=300.4 p=.000		Chibar2=259.6 p=.000		Chibar2=465.1 p=.000	
LL at conv.	-47828		-53948		-52279		-40709	
Wald Chi ² (30 df) (29 df in 2012)	10931 p=.000		12231 p=.000		11121.6 p=.000		11131 p=.000	
N	81904		95911		91607		81564	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or of very mixed race.

^c The percent of legislators is as of 2000 for the 2000 model, as of 2005 for the 2004 and 2008 model, as of 2010 for the 2012 model.

^d The percent urban is as of the 2000 Census for each state for 2000 through 2008 and as of 2010 for the 2012 model.

**Table 3b: Vote versus Abstention for Voting Age Citizens, for off year elections
2002, 2006, and 2010
(xtlogit coefficients, standard errors, and 2-tail significance)**

Variables	2002		2006		2010	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature						
White ^a female x % White Fem Leg ^c	0.78	0.001	0.75	0.001	0.31	0.192
White male x % White Male Leg	0.11	0.462	0.12	0.368	-0.24	0.098
Black female x % Black Fem Leg	6.59	0.001	7.31	0.000	6.76	0.000
Black male x % Black Male Leg	1.19	0.136	4.30	0.000	2.78	0.000
Latino female x % Latino Fem Leg	2.71	0.064	2.21	0.039	1.82	0.197
Latino male x % Latino Male Leg	1.18	0.071	1.10	0.106	0.32	0.589
White female	-0.04	0.729	0.01	0.945	-0.22	0.052
Black female	0.51	0.000	0.28	0.017	0.24	0.041
Black male	0.29	0.021	0.00	0.968	0.04	0.724
Latino female	0.05	0.667	-0.01	0.961	-0.24	0.029
Latino male	-0.07	0.568	-0.13	0.254	-0.35	0.002
Other race ^b	-0.30	0.006	-0.26	0.007	-0.58	0.000
%White female legislators	-0.50	0.405	0.05	0.928	0.55	0.284
% White male legislators	-0.66	0.132	-0.12	0.790	-0.39	0.220
% Black female legislators	0.39	0.894	1.32	0.534	-4.70	0.003
% Black male legislators	-2.59	0.024	-3.35	0.003	0.20	0.810
% Latino female legislators	-2.13	0.659	2.76	0.439	1.05	0.739
% Latino male legislators	-0.63	0.696	-1.83	0.306	-0.29	0.816
Constant	-4.88	0.000	-5.29	0.000	-5.00	0.000
TEST STATISTICS		S.E.		S.E.		S.E.
rho	.02	.00	.02	.00	.01	.00
Likelihood ratio test of rho=0	Chibar2=879.7 p=.000		Chibar2=707.5 p=.000		Chibar2=540.7 p=.000	
LL at conv.	-51110.95		-47666.3		-45071	
Wald Chi ² (30 df) (29 df in 2010)	14135 p=.000		12952 p=.000		12878 p=.000	
N	88326		82863		78781	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or of very mixed race.

^c The percent of legislators is as of 2000 for the 2002 model, as of 2005 for the 2006 model, as of 2010 for the 2010 model.

^d The percent urban is as of the 2000 Census for each state for 2002 and 2006 and as of 2010 for the 2010 model.

Table 4. Summary of whether higher collective representation, defined intersectionally, by gender, or by race, significantly increases turnout, decreases it, or has no effect.

Group/legislator group	Presidential election years				Off-years		
	2000	2004	2008	2012	2002	2006	2010
White Women							
I. white women legislators	YES	YES			YES	YES	
II. Gender: female leg.	YES	YES		YES	YES	yes	
White Men:							
I. white male legislators			YES	-NEG			-neg
Black Women							
I. black fem legislators	YES		Yes	YES	YES	YES	YES
Ib. black men legislators		YES	YES	YES	YES	YES	YES
II. Gender: female leg		-NEG	-NEG	-NEG		-NEG	
III Race: total black leg	YES	YES	YES	YES	YES	YES	YES
Black Men							
I. Black male legislators	YES	YES	YES	YES		YES	YES
Ib. Black fem legislators	YES	YES	YES	YES		YES	YES
III: Race: total black leg	YES	YES	YES	YES		YES	YES
Latinas							
I. Latina (fem.) legislators					yes	YES	
II. Gender: female leg.							
III. Ethnicity: total Latino					yes	yes	
Latino Men							
I. latino (male) leg.					yes	yes	
III. Ethnicity: total Latino					yes	yes	

Key to models:

I. Intersectional. Race/ethnicity and gender all match.

Ib. Race/ethnicity match, but other gender.

II. Gender only (for women), race/ethnicity ignored.

III. Race or ethnicity only, gender ignored.

Key to entries:

-NEG or YES significant at <.05 (2 tail test)

BOLD (-NEG or YES) significant at <.01 (2 tail test)

-neg or yes significant at <.10 (2 tail test)

Table 5. Average change in probability of voting when legislature composition is changed from its minimum to its maximum value, only for groups/years where the interaction effect was statistically significant.

	Presidential election years				Off-years		
Group/legislator group	2000	2004	2008	2012	2002	2006	2010
White Women							
I. white women legislators	.05	.07			.02	.05	
II. Gender: female leg.	.05	.07		.12	.01	.02	
White Men							
I. white male legislators			.03	-.02			-.06
Black Women							
I. black fem legislators	.10		.03	.11	.14	.17	.05
Ib. black men legislators		.07	.12	.13	-.03	.05	.14
II. Gender: female leg		-.03	.01	-.02		-.11	
III. Race: total black leg	.04	.04	.09	.16	.01	.09	.10
Black Men							
I. Black male legislators	.05	.10	.16	.16		.04	.13
Ib. Black fem legislators	-.03	.12	.09	.12		.16	-.01
III: Race: total black leg	.14	.10	.11	.18		.06	.06
Latinas							
I. Latina (fem.) legislators					.01	.12	
II. Gender: female leg.							
III. Ethnicity: total Latino					-.01	.027	
Latino Men							
I. latino (male) leg.					.02	-.03	
III: Ethnicity: total Latino					-.00	.025	

NOTE: In some cases the probability change from the interaction was overwhelmed by the probability change from the overall context effect.

Key to models:

I. Intersectional. Race/ethnicity and gender all match.

Ib. Race/ethnicity match, but other gender.

II. Gender only (for women), race/ethnicity ignored.

III. Race or ethnicity only, gender ignored.

APPENDIX B – Additional Estimation Tables

Appendix Table 3a: Vote versus Abstention for Voting Age Citizens, for presidential elections 2000, 2004, 2008, and 2012
(xtlogit coefficients, standard errors, and 2-tail significance)

Variables	2000			2004			2008			2012		
Dep Var: vote=1, abstain = 0	coeff.	s.e.	P > z	coeff.	s.e.	P > z	coeff.	s.e.	P > z	coeff.	s.e.	P > z
INTERACTIONS CROSS LEVELS												
White ^a female x % Wht Fem Leg ^c	0.63	0.25	0.012	0.82	0.22	0.000	0.07	0.22	0.767	0.31	0.26	0.227
White male x % Wht Male Leg	-0.08	0.16	0.615	-0.05	0.13	0.703	0.26	0.10	0.006	-0.38	0.15	0.010
Black female x %Black Fem Leg	6.96	1.86	0.000	0.87	1.33	0.514	2.29	1.39	0.099	8.65	1.64	0.000
Black male x %Black Male Leg	3.83	0.82	0.000	3.40	0.75	0.000	2.96	0.78	0.000	3.33	0.79	0.000
Latino female x % Latino Fem Leg	1.27	2.11	0.545	-0.81	1.00	0.417	-0.38	0.95	0.689	0.68	1.36	0.616
Latino male x % Latino Male Leg	-0.74	0.90	0.408	0.60	0.60	0.317	-0.20	0.52	0.697	0.73	0.57	0.202
White female	0.01	0.13	0.907	0.02	0.10	0.819	0.26	0.07	0.000	-0.14	0.12	0.225
Black female	0.31	0.13	0.017	0.46	0.11	0.000	0.71	0.09	0.000	0.71	0.13	0.000
Black male	-0.15	0.13	0.269	-0.22	0.11	0.042	0.30	0.10	0.002	0.20	0.12	0.105
Latino female	0.07	0.11	0.494	0.08	0.10	0.451	0.19	0.08	0.011	0.00	0.11	0.992
Latino male	-0.04	0.08	0.581	-0.30	0.11	0.006	-0.14	0.05	0.007	-0.29	0.12	0.013
Other race ^b	-0.47	0.11	0.000	-0.48	0.09	0.000	-0.24	0.06	0.000	-0.52	0.10	0.000
Age in years	0.03	0.00	0.000	0.03	0.00	0.000	0.02	0.00	0.000	0.03	0.00	0.000
Education	0.21	0.00	0.000	0.22	0.00	0.000	0.21	0.00	0.000	0.27	0.00	0.000
Family income	0.01	0.00	0.000	0.01	0.00	0.000	0.01	0.00	0.000	0.01	0.00	0.000
Income missing	-0.32	0.03	0.000	-0.52	0.02	0.000	-0.62	0.02	0.000	---	---	---
Union member	0.19	0.05	0.001	0.14	0.06	0.010	0.14	0.06	0.014	0.21	0.07	0.003
Unemployed	-0.27	0.05	0.000	-0.13	0.04	0.002	-0.12	0.04	0.003	-0.21	0.04	0.000
Not in laborforce	-0.15	0.02	0.000	-0.20	0.02	0.000	-0.20	0.02	0.000	-0.24	0.02	0.000
Homeowner	0.41	0.02	0.000	0.44	0.02	0.000	0.35	0.02	0.000	0.47	0.02	0.000
Married	0.36	0.02	0.000	0.29	0.02	0.000	0.25	0.02	0.000	0.34	0.02	0.000
Foreign born	-0.32	0.04	0.000	-0.37	0.04	0.000	-0.40	0.03	0.000	-0.45	0.04	0.000

% Urban ^d	-0.56	0.28	0.041	-0.42	0.22	0.054	-0.36	0.21	0.086	0.00	0.00	0.784
Professionalized Legislature	0.58	0.23	0.013	0.41	0.20	0.037	0.34	0.19	0.075	0.31	0.26	0.240
%White female legislators	0.16	0.45	0.729	0.39	0.42	0.348	0.88	0.40	0.028	1.70	0.53	0.001
% White male legislators	0.39	0.33	0.238	0.39	0.30	0.199	0.01	0.29	0.986	0.24	0.33	0.464
% Black female legislators	-0.49	2.21	0.823	-0.29	1.46	0.841	-0.68	1.41	0.630	-0.72	1.65	0.664
% Black male legislators	-0.86	0.86	0.316	-1.15	0.77	0.135	0.74	0.75	0.324	1.29	0.88	0.140
% Latino female legislators	-2.17	3.55	0.541	-1.25	2.43	0.606	0.51	2.34	0.826	-0.45	3.27	0.890
% Latino male legislators	0.56	1.21	0.645	1.00	1.22	0.413	-0.17	1.17	0.884	0.03	1.31	0.981
Constant	-4.58	0.37	0.000	-4.21	0.34	0.000	-3.96	0.32	0.000	-5.45	0.39	0.000
TEST STATISTICS												
/lnsig2u	-3.33	.22		-3.62	.23		-3.71	.23		-5.45	.39	
Sigma_u	0.19	.02		0.16	.02		0.16	.02		-3.00	.22	
rho	0.01	.002		0.01	.002		0.01	.002		.015	.003	
Likelihood ratio test of rho=0	Chibar2(01)=329.9 P>chibar2=.000			Chibar2(01)=300.4 p>chibar2=.000			Chibar2(01)=259.6 p>chibar2=.000			Chibar2(01)=465.1 p>chibar2=.000		
LL at conv.	-47828			-53948			-52279			-40709		
Wald Chi ² (30 df)	10931 P=.000			12231 p=.000			11121.6 p=.000			11131 p=.000		
N	81904			95911			91607			81564		

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or of very mixed race.

^c The percent of legislators is as of 2000 for the 2000 model, as of 2005 for the 2004 and 2008 model, as of 2010 for the 2012 model.

^d The percent urban is as of the 2000 Census for each state for 2000 through 2008 and as of 2010 for the 2012 model.

Appendix Table 3b: Vote versus Abstention for Voting Age Citizens, for off year elections 2002, 2006, and 2010
(xtlogit coefficients, standard errors, and 2-tail significance)

Variables	2002			2006			2010		
Dep Var: vote=1, abstain = 0	coeff.	s.e.	P > z	coeff.	s.e.	P > z	coeff.	s.e.	P > z
INTERACTIONS CROSS LEVELS									
White ^a female x % Wht Fem Leg ^c	0.78	0.22	0.001	0.75	0.23	0.001	0.31	0.24	0.192
White male x % Wht Male Leg	0.11	0.15	0.462	0.12	0.14	0.368	-0.24	0.14	0.098
Black female x %Black Fem Leg	6.59	1.90	0.001	7.31	1.44	0.000	6.76	1.34	0.000
Black male x %Black Male Leg	1.19	0.80	0.136	4.30	0.86	0.000	2.78	0.77	0.000
Latino female x % Latino Fem Leg	2.71	1.46	0.064	2.21	1.07	0.039	1.82	1.42	0.197
Latino male x % Latino Male Leg	1.18	0.66	0.071	1.10	0.68	0.106	0.32	0.59	0.589
White female	-0.04	0.12	0.729	0.01	0.11	0.945	-0.22	0.11	0.052
Black female	0.51	0.13	0.000	0.28	0.12	0.017	0.24	0.12	0.041
Black male	0.29	0.13	0.021	0.00	0.12	0.968	0.04	0.12	0.724
Latino female	0.05	0.11	0.667	-0.01	0.11	0.961	-0.24	0.11	0.029
Latino male	-0.07	0.12	0.568	-0.13	0.12	0.254	-0.35	0.12	0.002
Other race ^b	-0.30	0.11	0.006	-0.26	0.10	0.007	-0.58	0.10	0.000
Age in years	0.04	0.00	0.000	0.04	0.00	0.000	0.04	0.00	0.000
Education	0.23	0.00	0.000	0.23	0.00	0.000	0.23	0.00	0.000
Family income	0.01	0.00	0.000	0.00	0.00	0.000	0.00	0.00	0.000
Income missing	0.25	0.03	0.000	0.11	0.03	0.000	-----	-----	----
Union member	0.22	0.05	0.000	0.25	0.06	0.000	0.20	0.06	0.001
Unemployed	-0.21	0.04	0.000	-0.30	0.05	0.000	-0.15	0.04	0.000
Not in laborforce	-0.19	0.02	0.000	-0.22	0.02	0.000	-0.21	0.02	0.000
Homeowner	0.58	0.02	0.000	0.64	0.02	0.000	0.57	0.02	0.000
Married	0.39	0.02	0.000	0.35	0.02	0.000	0.41	0.02	0.000
Foreign born	-0.50	0.04	0.000	-0.59	0.04	0.000	-0.52	0.04	0.000

% Urban ^d	-0.70	0.37	0.057	-0.58	0.32	0.069	0.00	0.00	0.233
Professionalized Legislature	0.35	0.32	0.268	0.81	0.29	0.005	0.49	0.25	0.054
%White female legislators	-0.50	0.59	0.405	0.05	0.60	0.928	0.55	0.51	0.284
% White male legislators	-0.66	0.44	0.132	-0.12	0.44	0.790	-0.39	0.32	0.220
% Black female legislators	0.39	2.96	0.894	1.32	2.13	0.534	-4.70	1.59	0.003
% Black male legislators	-2.59	1.15	0.024	-3.35	1.12	0.003	0.20	0.84	0.810
% Latino female legislators	-2.13	4.81	0.659	2.76	3.57	0.439	1.05	3.15	0.739
% Latino male legislators	-0.63	1.63	0.696	-1.83	1.79	0.306	-0.29	1.26	0.816
Constant	-4.88	0.48	0.000	-5.29	0.48	0.000	-5.00	0.37	0.000
TEST STATISTICS									
/lnsig2u	-2.68	.21		-2.81	.21		-3.07	.22	
Sigma_u	.26	.03		.25	.03		.22	.02	
rho	.02	.00		.02	.00		.01	.00	
Likelihood ratio test of rho=0	Chibar2(01)=879.75 p>chibar2=.000			Chibar2(01)=707.5 p>chibar2=.000			Chibar2(01)=540.7 p>chibar2=.000		
LL at conv.	-51110.953			-47666.3			-45071		
Wald Chi ² (30 df)	14135.69 P=.000			12952 p=.000			12878 p=.000		
N	88326			82863			78781		

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or persons of very mixed race.

^c The percent of legislators is as of 2000 for the 2002 model, as of 2005 for the 2006 model, as of 2010 for the 2010 model.

^d The percent urban is as of the 2000 Census for each state for 2002 and 2006 and as of 2010 for the 2010 model.

Appendix Table 6a: Vote versus Abstention for Voting Age Citizens, 2000, 2004, 2008, and 2012
Collective Representation by Gender: women times total women in legislature,
key variables (xtlogit coefficients and 2-tail significance)

Variables	2000		2004		2008		2012	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature								
White ^a female x % Tot Female Leg ^c	0.72	0.012	0.73	0.005	0.02	0.923	0.66	0.033
White male x % White Male Leg	-0.17	0.330	-0.09	0.536	0.27	0.007	-0.46	0.003
Black female x % Tot Female Leg	-0.44	0.469	-1.33	0.006	-1.07	0.033	-1.68	0.029
Black male x % Black Male Leg	3.69	0.000	3.56	0.000	3.00	0.000	3.26	0.000
Latino female x % Tot Female Leg	0.57	0.472	-0.18	0.787	0.88	0.160	1.20	0.174
Latino male x % Latino Male Leg	-0.31	0.623	0.80	0.184	-0.13	0.806	0.80	0.157
White female	-0.09	0.564	-0.02	0.874	0.27	0.003	-0.29	0.048
Black female	0.59	0.002	0.77	0.000	1.05	0.000	1.45	0.000
Black male	-0.20	0.158	-0.26	0.028	0.31	0.002	0.14	0.246
Latino female	-0.11	0.643	0.07	0.723	-0.04	0.819	-0.33	0.202
Latino male	-0.03	0.676	-0.33	0.004	-0.14	0.007	-0.34	0.005
Other race ^b	-0.52	0.000	-0.50	0.000	-0.23	0.000	-0.57	0.000
% Total female legislators	0.08	0.894	0.71	0.224	1.24	0.027	1.93	0.007
% White male legislators	0.48	0.203	0.67	0.083	0.36	0.333	0.79	0.054
% Black male legislators	-0.96	0.139	-1.33	0.026	0.47	0.419	0.98	0.176
% Latino male legislators	-0.15	0.835	0.33	0.621	0.00	0.997	-0.24	0.742
Constant	-4.52	0.000	-0.15	0.000	-4.32	0.000	-5.80	0.000
TEST STATISTICS		S.E.		S.E.		S.E.		S.E.
/lnsig2u	-3.31	.22	-3.61	.23	-3.69	.23	-2.94	.22
Sigma_u	0.19	.02	.16	.02	.16	.02	.23	.03
rho	.01	.002	.008	.002	.008	.002	.016	.003
Likelihood ratio test of rho=0								
LL at convergence								
Wald Chi ² (30 df) (29 df in 2012)								
N	81904		95911		91607		81564	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or persons of very mixed race.

^c The percent of legislators is as of 2000 for the 2000 model, as of 2005 for the 2004 and 2008 model, as of 2010 for the 2012 model.

^d The percent urban is as of the 2000 Census for each state for 2000 through 2008 and as of 2010 for the 2012 model.

Appendix Table 6b: Vote versus Abstention for Voting Age Citizens, 2002, 2006, and 2010
Collective Representation by Gender: women times total women in legislature,
key variables (xtlogit coefficients and 2-tail significance)

Variables	2002		2006		2010	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature						
White ^a female x % Tot Female Leg ^c	0.78	0.002	0.48	0.076	0.36	0.213
White male x % White Male Leg	0.04	0.799	0.16	0.292	-0.27	0.085
Black female x % Tot Female Leg	-0.41	0.475	-2.32	0.000	-0.67	0.285
Black male x % Black Male Leg	1.13	0.159	4.40	0.000	2.76	0.000
Latino female x % Tot Female Leg	0.00	0.997	1.07	0.135	-0.15	0.869
Latino male x % Latino Male Leg	1.20	0.067	1.15	0.091	0.30	0.605
White female	-0.12	0.422	0.06	0.689	-0.27	0.068
Black female	0.79	0.000	1.17	0.000	0.71	0.000
Black male	0.25	0.054	0.02	0.903	0.02	0.864
Latino female	0.11	0.641	-0.15	0.500	-0.15	0.574
Latino male	-0.11	0.395	-0.11	0.381	-0.37	0.002
Other race ^b	-0.33	0.004	-0.23	0.029	-0.59	0.000
% Total female legislators	-0.63	0.410	0.40	0.636	0.58	0.431
% White male legislators	-0.73	0.139	-0.09	0.869	-0.37	0.379
% Black male legislators	-2.45	0.004	-2.88	0.001	-1.51	0.042
% Latino male legislators	-1.25	0.189	-0.66	0.499	0.02	0.983
Constant	-4.72	0.000	-5.42	0.000	-4.91	0.000
TEST STATISTICS		S.E.		S.E.		S.E.
/lnsig2u	-2.67	0.21	-2.78	.21	-2.86	.21
Sigma u	0.26	0.03	.25	.03	.24	.03
rho	0.02	0.00	.018	.004	.017	.004
Likelihood ratio test of rho=0	Chibar2=906 p=.000		Chibar2=746 p=.000		Chibar2=698 p=.000	
LL at conv.	-51119.7		-47672		-45089	
Wald Chi ² (30 df) (29 df in 2010)	14128 p=.000		12946 p=.000		12859 p=.000	
N	88326		82863		78781	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or of very mixed race.

^c The percent of legislators is as of 2000 for the 2002 model, as of 2005 for the 2006 model, as of 2010 for the 2010 model.

^d The percent urban is as of the 2000 Census for each state for 2002 and 2006 and as of 2010 for the 2010 model.

Appendix Table 7a: Vote versus Abstention for Voting Age Citizens, 2000, 2004, 2008, and 2012
Collective Representation by Race: African Americans times total African American legislators
key variables (xtlogit coefficients and 2-tail significance)

Variables	2000		2004		2008		2012	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature								
White ^a female x % Wht Female Leg ^c	0.59	0.018	0.76	0.001	0.03	0.881	0.23	0.364
White male x % White Male Leg	-0.07	0.674	-0.04	0.760	0.26	0.006	-0.36	0.015
Black female x % Total Black Leg	1.50	0.009	1.80	0.000	1.59	0.003	3.69	0.000
Black male x % Total Black Leg	3.43	0.000	2.77	0.000	2.36	0.000	3.27	0.000
Latino female x % Lat Female Leg	1.34	0.524	-0.89	0.373	-0.43	0.652	0.60	0.661
Latino male x % Latino Male Leg	-0.76	0.401	0.57	0.340	-0.22	0.674	0.70	0.216
White female	0.03	0.811	0.04	0.681	0.27	0.000	-0.11	0.324
Black female	0.38	0.003	0.27	0.014	0.61	0.000	0.65	0.000
Black male	-0.23	0.100	-0.29	0.012	0.24	0.018	0.06	0.628
Latino female	0.08	0.449	0.09	0.405	0.20	0.010	0.01	0.911
Latino male	-0.04	0.571	-0.30	0.007	-0.14	0.007	-0.28	0.017
Other race ^b	-0.46	0.000	-0.48	0.000	-0.24	0.000	-0.52	0.000
% White female legislators	0.18	0.696	0.41	0.321	0.90	0.024	1.77	0.001
% White male legislators	0.39	0.236	0.40	0.185	0.02	0.936	0.21	0.519
% Total Black legislators	-0.83	0.090	-1.01	0.018	0.22	0.597	0.56	0.281
% Latino female legislators	-2.49	0.464	-1.44	0.544	0.79	0.730	-0.89	0.782
% Latino male legislators	0.65	0.578	1.10	0.356	-0.28	0.812	0.18	0.892
Constant	-4.61	0.000	-4.24	0.000	-3.97	0.000	-5.44	0.000
TEST STATISTICS		S.E.		S.E.		S.E.		S.E.
/lnsig2u	-3.34	.22	-3.64	.23	-3.71	.23	-3.01	.22
Sigma_u	.19	.02	.16	.02	.16	.02	.22	.02
rho	.01	.002	.008	.002	.007	.002	.015	.003
Likelihood ratio test of rho=0	Chibar2=326 p=.000		Chibar2=302 p=.000		Chibar2=259 p=.000		Chibar2=461 p=.000	
LL at convergence	-47830		-53941		-52276		-40704	
Wald Chi ² (30 df) (29 df in 2012)	10929 p=.000		12241 p=.000		11126 p=.000		11138 p=.000	
N	81904		95911		91607		81564	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or of very mixed race.

^c The percent of legislators is as of 2000 for the 2000 model, as of 2005 for the 2004 and 2008 model, as of 2010 for the 2012 model.

^d The percent urban is as of the 2000 Census for each state for 2000 through 2008 and as of 2010 for the 2012 model.

Appendix Table 7b: Vote versus Abstention for Voting Age Citizens, 2002, 2006, and 2010
Collective Representation by Race: African Americans times total African American
legislators, key variables (xtlogit coefficients and 2-tail significance)

Variables	2002		2006		2010	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature						
White ^a female x % Wht Female Leg ^c	0.73	0.001	0.66	0.004	0.22	0.355
White male x % White Male Leg	0.12	0.398	0.14	0.296	-0.22	0.130
Black female x % Total Black Leg	1.94	0.001	3.71	0.000	3.15	0.000
Black male x % Total Black Leg	0.80	0.215	3.34	0.000	2.45	0.000
Latino female x % Lat Female Leg	2.72	0.063	2.15	0.044	1.77	0.212
Latino male x % Latino Male Leg	1.18	0.072	1.09	0.111	0.30	0.612
White female	-0.02	0.854	0.04	0.739	-0.19	0.096
Black female	0.52	0.000	0.16	0.193	0.16	0.191
Black male	0.31	0.018	-0.07	0.601	-0.03	0.801
Latino female	0.06	0.610	0.01	0.932	-0.23	0.039
Latino male	-0.06	0.622	-0.12	0.296	-0.34	0.003
Other race ^b	-0.28	0.008	-0.25	0.010	-0.57	0.000
% White female legislators	-0.42	0.474	0.07	0.914	0.67	0.202
% White male legislators	-0.63	0.148	-0.13	0.776	-0.48	0.136
% Total Black legislators	-1.92	0.003	-2.02	0.001	-1.43	0.005
% Latino female legislators	-3.41	0.464	1.64	0.649	-0.06	0.985
% Latino male legislators	-0.24	0.881	-1.32	0.467	0.05	0.970
Constant	-5.00	0.000	-5.35	0.000	-4.92	0.000
TEST STATISTICS		S.E.		S.E.		S.E.
/lnsig2u	-2.68	.21	-2.76	.21	-3.00	.22
Sigma u	0.26	.028	.25	.03	.22	.02
rho	0.02	.004	.019	.004	.015	.003
Likelihood ratio test of rho=0	Chibar2=884 p=.000		Chibar2=765 p=.000		Chibar2=587 p=.000	
LL at conv.	-51111.8		-47658		-45068	
Wald Chi ² (30 df) (29 df in 2010)	14135 p=.000		12961 p=.000		12882 p=.000	
N	88326		82863		78781	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or persons of very mixed race.

^c The percent of legislators is as of 2000 for the 2002 model, as of 2005 for the 2006 model, as of 2010 for the 2010 model.

^d The percent urban is as of the 2000 Census for each state for 2002 and 2006 and as of 2010 for the 2010 model.

Appendix Table 7c: Vote versus Abstention for Voting Age Citizens, 2002, 2006, and 2010
Collective Representation by Ethnicity: Latinos times total Latinos in legislature
key variables (xtlogit coefficients and 2-tail significance)

Variables	2002		2006	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature				
White ^a female x % Wht Female Leg ^c	0.77	0.001	0.74	0.001
White male x % White Male Leg	0.11	0.468	0.12	0.363
Black female x % Black Female Leg	6.59	0.001	7.31	0.000
Black male x % Black Male Leg	1.19	0.137	4.31	0.000
Latino female x % Total Latino Leg	0.87	0.062	0.71	0.085
Latino male x % Total Latino Leg	0.95	0.054	0.75	0.090
White female	-0.04	0.729	0.01	0.933
Black female	0.51	0.000	0.28	0.017
Black male	0.29	0.021	0.00	0.974
Latino female	0.04	0.732	0.00	0.991
Latino male	-0.08	0.504	-0.14	0.241
Other race ^b	-0.30	0.006	-0.26	0.007
% White female legislators	-0.50	0.396	0.00	0.994
% White male legislators	-0.65	0.135	-0.18	0.679
% Black female legislators	0.57	0.841	0.91	0.665
% Black male legislators	-2.62	0.021	-3.30	0.003
% Total Latino legislators	-1.02	0.160	-0.36	0.594
Constant	-4.87	0.000	-5.25	0.000
TEST STATISTICS		S.E.		S.E.
/lnsig2u	-2.68	.21	-2.79	.21
Sigma u	.26	.03	.25	.03
rho	.02	.004	.018	.004
Likelihood ratio test of rho=0	chibar2=884 p=.000		Chibar2=751 p=.000	
LL at conv.	-51110.8		-47667.3	
Wald Chi ² (30 df) (29 df in 2010)	14135 p=.000		12951 p=.000	
N	88326		82863	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or of very mixed race.

^c The percent of legislators is as of 2000 for the 2002 model, as of 2005 for the 2006 model.

^d The percent urban is as of the 2000 Census for each state for 2002 and 2006.

Appendix Table 8a: Vote versus Abstention for Voting Age Citizens, 2000, 2004, 2008, and 2012
Collective Representation by Other Gender, Same Race for African Americans
key variables (xtlogit coefficients and 2-tail significance)

Variables	2000		2004		2008		2012	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature								
White ^a female x % Wht Female Leg ^c	0.69	0.006	0.79	0.000	0.07	0.767	0.33	0.204
White male x % White Male Leg	-0.09	0.576	-0.04	0.728	0.26	0.007	-0.38	0.009
Black female x % Black Male Leg	1.02	0.153	2.92	0.000	2.19	0.003	3.70	0.000
Black male x % Black Female Leg	9.46	0.000	6.06	0.000	5.04	0.001	7.44	0.000
Latino female x % Lat Female Leg	1.35	0.522	-0.89	0.372	-0.41	0.665	0.68	0.615
Latino male x % Latino Male Leg	-0.76	0.400	0.57	0.341	-0.22	0.679	0.74	0.195
White female	0.00	0.982	0.03	0.745	0.26	0.000	-0.15	0.199
Black female	0.46	0.000	0.26	0.015	0.63	0.000	0.80	0.000
Black male	-0.16	0.234	-0.23	0.052	0.31	0.003	0.12	0.326
Latino female	0.07	0.515	0.08	0.419	0.20	0.011	0.00	0.973
Latino male	-0.04	0.571	-0.30	0.006	-0.14	0.007	-0.29	0.011
Other race ^b	-0.48	0.000	-0.48	0.000	-0.24	0.000	-0.53	0.000
% White female legislators	0.13	0.775	0.40	0.334	0.87	0.029	1.69	0.001
% White male legislators	0.38	0.248	0.40	0.184	0.01	0.977	0.24	0.465
% Black female legislators	-0.52	0.814	-0.49	0.734	-0.80	0.572	-0.69	0.676
% Black male legislators	-0.73	0.396	-1.19	0.122	0.77	0.302	1.30	0.139
% Latino female legislators	-2.11	0.555	-1.25	0.604	0.52	0.824	-0.42	0.899
% Latino male legislators	0.53	0.663	1.02	0.399	-0.17	0.887	0.02	0.991
Constant	-4.56	0.000	-4.22	0.000	-3.96	0.000	-5.43	0.000
TEST STATISTICS		S.E.		S.E.		S.E.		S.E.
/lnsig2u	-3.31	.22	-3.63	.23	-3.71	.23	-2.99	.22
Sigma_u	.19	.02	.16	.02	.16	.02	.22	.02
rho	.01	.002	.008	.002	.007	.002	.015	.003
Likelihood ratio test of rho=0	Chibar2=334 p=.000		Chibar2=297 p=.000		Chibar2=259 p=.000		Chibar2=467 p=.000	
LL at convergence	-47834		-53942		-52278		-40712	
Wald Chi ² (30 df) (29 df in 2012)	10923 p=.000		12240 p=.000		11123 p=.000		11129 p=.000	
N	81904		95911		91607		81564	

^a “White” in the table refers to non Hispanic whites.

^b “Other race” includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or persons of very mixed race.

^c The percent of legislators is as of 2000 for the 2000 model, as of 2005 for the 2004 and 2008 model, as of 2010 for the 2012 model.

^d The percent urban is as of the 2000 Census for each state for 2000 through 2008 and as of 2010 for the 2012 model.

Appendix Table 8b: Vote versus Abstention for Voting Age Citizens, 2002, 2006, and 2010
Collective Representation by Other Gender, Same Race for African Americans
key variables (xtlogit coefficients and 2-tail significance)

Variables	2002		2006		2010	
Dep Var: vote=1, abstain = 0	coeff.	P > z	coeff.	P > z	coeff.	P > z
Indep. variables involving race, ethnicity, gender, or legislature						
White ^a female x % Wht Female Leg ^c	0.77	0.001	0.71	0.002	0.30	0.202
White male x % White Male Leg	0.12	0.411	0.13	0.337	-0.23	0.112
Black female x % Black Male Leg	1.97	0.005	4.82	0.000	3.25	0.000
Black male x % Black Female Leg	-1.25	0.569	6.25	0.000	3.68	0.013
Latino female x % Lat Female Leg	2.78	0.058	2.19	0.040	1.85	0.191
Latino male x % Latino Male Leg	1.20	0.068	1.12	0.100	0.33	0.573
White female	-0.03	0.793	0.02	0.858	-0.21	0.061
Black female	0.58	0.000	0.23	0.044	0.29	0.010
Black male	0.45	0.001	0.06	0.623	0.11	0.392
Latino female	0.06	0.625	0.00	0.988	-0.23	0.033
Latino male	-0.06	0.609	-0.13	0.258	-0.35	0.003
Other race ^b	-0.28	0.008	-0.26	0.008	-0.57	0.000
% White female legislators	-0.48	0.417	0.09	0.884	0.57	0.265
% White male legislators	-0.67	0.123	-0.11	0.802	-0.40	0.209
% Black female legislators	0.91	0.758	1.58	0.456	-4.33	0.007
% Black male legislators	-2.70	0.019	-3.54	0.002	0.04	0.965
% Latino female legislators	-2.12	0.660	2.75	0.440	0.97	0.758
% Latino male legislators	-0.66	0.686	-1.82	0.306	-0.28	0.827
Constant	-4.87	0.000	-5.31	0.000	-5.01	0.000
TEST STATISTICS		S.E.		S.E.		S.E.
/lnsig2u	-2.68	.210	-2.82	.21	-3.06	.22
Sigma u	0.26	.028	.24	.03	.22	.02
rho	0.02	.004	.018	.004	.014	.003
Likelihood ratio test of rho=0	Chibar2=884 p=.000		Chibar2=705 p=.000		Chibar2=544 p=.000	
LL at conv.	-51113.61		-47664		-45076	
Wald Chi ² (30 df) (29 df in 2010)	14132 p=.000		12955 p=.000		12875 p=.000	
N	88326		82863		78781	

^a "White" in the table refers to non Hispanic whites.

^b "Other race" includes all persons not classified as Latino, Black, or non Hispanic white; these individuals are primarily Asian American Pacific Islanders or Native Americans or of very mixed race.

^c The percent of legislators is as of 2000 for the 2002 model, as of 2005 for the 2006 model, as of 2010 for the 2010 model.

^d Percent urban is per the 2000 Census for each state for 2002 & 2006 and per 2010 for the 2010 model.