

Racing Towards Representation:
A Hurdle Model of Latino Incorporation

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Abstract

Despite 35 years of empirical research, the question of how electoral structure influences Latino representation continues to be debated. Motivated by the uncertainty surrounding electoral systems, in this paper I argue that the inconsistent and inconclusive results of previous research stem from two limitations – one theoretical and the other methodological – of commonly-used models. In the following analysis, I utilize an alternative theoretical conceptualization and the appropriate methodological approach to shed light on several puzzles encountered in the literature. My findings suggest, for example, that electoral structure and voting strength are key components in determining the likelihood of Latino representation, but specific demographic and institutional contexts determine how these matter: *Ceteris paribus*, ward elections hurt Latino chances of representation, unless there are high levels of segregation within a district. Moreover, I find that the impact of the Latino population is in great part determined by the likelihood that the populace (1) has voting rights (i.e. US citizenship), (2) is not in direct competition with blacks for elected seats, and (3) resides in an area of the United States with a long history of Latino incorporation. In short, in the race towards representation, Latinos cannot simply tread the same path as their black counterparts, but must forge new roads to victory.

Introduction

Despite 35 years of empirical research, the question of how electoral structure influences Latino representation continues to be debated. A review of the literature reveals what appear to be the fault-lines of this debate - that ward elections increase the likelihood of Latino representation at the municipal level (MacManus 1978, Taebel 1978, Karnig 1979), that electoral structure has no statistically significant impact on Latino representation (Alonzie & Manganaro 1993, Bullock & MacManus 1991, Welch 1990, Zax 1990) and that ward structures may actually decrease the likelihood of representation (Meier et al. 2005, Leal 2004). With the reauthorization of the Voting Rights Act in 2006, and the subsequent continued reliance on ward-based elections as the presumed key mechanism to avoid voter dilution, the suggestion that these types of electoral systems in fact either do nothing or actually diminish Latino representation gives pause for concern. Motivated by the uncertainty surrounding electoral systems, in this paper I argue that the inconsistent and inconclusive results of previous research stem from two limitations – one theoretical and the other methodological – of commonly-used models.

Theoretically, urban scholarship has tended to extend what we know of black representation – in particular, that electoral structure and numerical voting strength matter the most – to the study of Latino representation as well. But this substantive extension is problematic on several fronts. As I describe below, for example, the effects of electoral structure are conditioned specifically on Latinos' unique segregation patterns, the distinct context of immigration, and Latino political and social assimilation. Ignoring these particulars has thus led to underspecified models that obscure the true effects of electoral structure and Latino voting strength.

Methodological limitations have also constrained extant research on Latino representation. Specifically, at its most basic level descriptive representation is a mere head count – in a sea of faces, how many are black, Latino, female, etc? Yet the vast majority of research examining descriptive representation has focused on a more complex conceptual-

ization – proportional representation. Implicit in this conceptualization is the notion that descriptive representation is an outcome (either you are descriptively represented or you are not), and that this is the necessary but not sufficient step for substantive policy change (see e.g., Gills & Betancur 2000, Browning, Marshall & Tabb 1984, Jennings 2003). But this conceptualization limits our ability to ask more detailed questions about the process of descriptive representation: Why do some communities only have one Latino school board member, whereas others have 4 or 5? Put differently, what specifically about a community and its institutional framework predicts any representation, and is this the same or different than the factors that predict more than one Latino representative? Explicitly delineating these two hurdles of Latino descriptive representation can further our understanding of the relationships between voting strength, electoral structure, and ultimately policy responsiveness.

In the following analysis, I utilize this alternative theoretical conceptualization and the appropriate methodological approach to shed light on several puzzles encountered in the literature. My findings suggest, for example, that electoral structure and voting strength are key components in determining the likelihood of Latino representation, but specific demographic and institutional contexts determine how these matter: *Ceteris paribus*, ward elections hurt Latino chances of representation, unless there are high levels of segregation within a district. Moreover, I find that the impact of the Latino population is in great part determined by the likelihood that the populace (1) has voting rights (i.e. US citizenship), (2) is not in direct competition with blacks for elected seats, and (3) resides in an area of the United States with a long history of Latino incorporation. In short, in the race towards representation, Latinos cannot simply tread the same path as their black counterparts, but must forge new roads to victory.

I structure my arguments and evidence as follows. In the next section I provide a brief overview of the two main explanatory variables of descriptive representation - electoral structure and voting strength - analyzing their theoretical relationship to minority incorporation

in general, and their relationship to the unique characteristics the Latino population in the US. I next move to a reconceptualization of descriptive representation as a process, describing the two steps of incorporation. Armed with this new conceptual framework, I analyze the institutional and contextual determinants of Latino school board representation, and conclude with an analysis of my findings' implications for a dynamic understanding of Latino descriptive representation.

Electoral Structure and Segregation

Electoral structure is purported to influence the probability of representation because of two persistent factors: (1) most US cities are segregated spaces, and (2) non-whites tend to be a minority within any jurisdiction. At-large systems thus create an additional burden for minority candidates: Minority candidates must secure not only their constituency's support but also engender substantial cross-over voting from non-minority voters. At the same time, ward arrangements often result in majority-minority districts in which minorities can be reasonably assured of securing a candidate of choice. Indeed, the importance of electoral systems in preventing voter dilution is one of the capstones of the Voting Rights Act, and to this day, attempts to change from a ward to at-large system are denied based on such changes' potential for vote dilution (see e.g. US Congress HR 109-478).

To be sure, evidence that this electoral system works for black representation isn't hard to find. More than thirty years of research findings consistently point to a positive and significant impact of ward electoral structures on black representation at the local level (see e.g., Engstrom & McDonald 1981, Engstrom & McDonald 1982, Engstrom & McDonald 1986, Karnig 1979, Karnig & Welch 1980, Robinson & Dye 1978, Stewart, England & Meier 1989). However, attempts to extend this phenomenon to Latino representation have been anything but successful. For example, while studies by MacManus (1978), Taebel (1978), and Karnig (1979) find a weak positive relationship between ward-based elections and Latino

representation on city councils, Bullock (1991), Welch (1990), Zax (1990), and Alonzie (1993) find no significant effects of structure per se. Recent papers by Meier et al. (2005) and Leal et al. (2004) further confuse the issue by determining that both at-large and ward-based systems systematically underrepresent Latinos on school boards (although Latinos fare worse in at-large elections).

Why these disparate findings? In most jurisdictions Latinos constitute less than a majority of the population, and thus we would expect them to face the same hurdles as blacks in jurisdictions with at-large elections. However, the spatial distribution of Latinos differs markedly from that of blacks. The legacy of segregation in most metropolitan and Southern cities continues to this day (Massey & Denton 1993), with black-white dissimilarity scores - indices that measure the proportion of a population that would have to move to different census tracts to achieve equal representation throughout an area - ranging from 60 to 90 (Logan 2001). Thus, the value-added by ward electoral systems continues to be significant for blacks seeking elected office. In contrast, segregation between Latinos and whites has been stable between 1980 and 2000 and is considerably less than that for blacks and whites. In particular, Latino-white segregation was recorded at 50.6 in 1990 and 51.5 in 2000, and since 1980, Latinos have tended to move from more segregated areas to less segregated areas (Logan 2002, Logan 2001). Similarly, levels of segregation between Latinos and blacks remain relatively low, with an average dissimilarity index score of 49.2 in 2000 (Logan 2001).

These differences in segregation patterns of Latinos and blacks provide the first clue as to why previous studies have found electoral structure to matter little for Latinos, unlike the case for blacks. Specifically, with more Latinos becoming residentially integrated with whites and blacks, Latinos are likely to reap fewer benefits from a ward electoral system. This is not to say that ward elections will not improve Latino representation outcomes, but that rather the likelihood of a ward structure leading to Latino representation will be conditional on the level of segregation within a jurisdiction. Others have noted this relationship between segregation and structure (Davidson & Korbel 1981, Engstrom & McDonald 1982, Mladenka

1989, Vedlitz & Johnson 1982), yet few have tested this claim directly (but see Sass 2000, Trounstein & Valdini 2008).

The Impact of the Size of the Latino Population

Assuming that given the choice, minorities will elect a fellow minority candidate over a white candidate, the impact of the size of the minority population on the likelihood of representation is not in doubt (Alonzie & Manganaro 1993, Welch 1990, Welch & Karning 1978). However, when this assumption is imposed on Latino representation the results tend to be rather weaker. For example, while studies have found a consistent and positive relationship between Latino population size and Latino representation on school boards and city councils, the coefficient on Latino population size has been markedly smaller than that for black representation (see e.g. Leal 2004, Meier et al. 2004, Meier et al. 2005, Rocha, Wrinkle & Polinard 2005, Zax 1990). What these other studies have not accounted for, however, are the combined effects of immigration and citizenship, and political and social assimilation. As I detail below, each of these factors condition the strength of the Latino electorate.

Immigration and Citizenship

Since the 1970s, immigration has represented by far the fastest and the largest source of Latino population growth, and, as a result, the first generation – the foreign born – has become more numerous than the second or the third-plus generations – those born in the United States of U.S.-born parents (Suro & Passel 2003). The fact that most Latinos in the US are foreign born has several consequences. First, foreign born Latinos are most often not citizens, and although naturalization rates have been increasing for Latinos (Pachon & DeSipio 1992), the barriers of attaining legal residency remain considerable (Highton & Burris 2002). Thus, the Latino population eligible to participate in politics is often much

smaller than the overall population. Second, foreign born Latinos come to the US with little education and few financial resources (DeSipio 1996, Suro & Passel 2003). According to the 2002 National Survey of Latinos (Suro 2002), foreign born Latinos tend to maintain their native tongue, and it is generally not until the second or third generation that Latinos become bilingual. Consequently, the potential pool of Latino candidates and voters is diminished by issues of language, citizenship and access to resources.

Political and Social Assimilation

Concurrent with the continued growth has been a broader distribution of the Latino population throughout the country. Although the vast majority of immigrants continue to be concentrated in the Southwest or the “established” metropolitan areas of Los Angeles, Chicago, New York, Miami, and Houston (Singer 2004, Suro & Singer 2002), in the 1990s the South became a new destination for many Mexican- and other Latino-Americans. These changes in immigration patterns create a varied landscape across the U.S. in terms of levels of Latino political and social incorporation. Traditional destinations, like California, Texas, and New Mexico have had long histories of Latino settlement, and constitute the “heartland” of more socially and politically incorporated Latinos. Indeed, the majority of Latinos who have assimilated in the US – i.e. become naturalized; are bilingual or monolingual in English; have graduated from high school (Massey 1995) – reside in these traditional destinations (Suro & Passel 2003). Moreover, almost all Latino elected officials (75%) are found in these states (National Association of Latino Elected Officials 2002). This is in sharp contrast to states like Georgia and Alabama, who witnessed large increases in their Latino population, but have had relatively little experience with Latino populations and no Latinos represented in political office. These Latino populations are more likely to be non-citizens, and lack the language skills and resources of their more established counterparts in traditional destinations. Lastly, these destinations have witnessed some anti-immigration backlash recently (Kochar, Suro & Tafoya 2005), and thus Latinos may have additional barriers to cross in

gaining elected office.

In sum, that population size matters for descriptive representation is not in question. How it matters, however, is. The size of the minority electorate is crucial only insofar as it indicates minority voting strength and the likelihood of a minority candidate emerging from the polity (Marschall & Ruhil 2004). When should we expect to see a large minority population with a low likelihood of a representative running for office? New immigrant populations and minority populations with language and citizenship barriers are prime examples of groups that may comprise as much as 75% of the population and yet lack the opportunity to be represented in elected office (see e.g. Bowler, Donovan & Brockington 2003). Thus, models that do not include variables that capture voting and candidacy eligibility, and social and political assimilation may misrepresent the true effect of population size.

A New Model of Descriptive Representation

Beyond these problems resulting from inadequate attention paid to the specific context of Latino representation, almost all studies of minority descriptive representation post-1980 suffer from a greater theoretical deficiency that results directly from the conflation of the concept of descriptive representation with its outcome. Engstroms and McDonald's (1981) seminal work on minority descriptive representation radically altered how scholars conceptualized representation, moving the operationalization of representation from a ratio or difference score to a proportion. And while Engstrom and McDonald's work confronted the methodological problems associated with those methods¹, it also added additional theoretical and methodological limitations. No longer was descriptive representation seen as a head count – how many Latino school board members are there? – but now descriptive representation was assessed according to population size.

This narrow focus on proportionality masks the sequential nature of representation – seats are not won proportionally, but rather one by one. And for many jurisdictions, minority

candidates and their supporters work very hard to overcome an initial hurdle of acquiring one seat (see e.g. Browning, Marshall & Tabb 1984), and may wait years to gain another. Indeed, of the nearly 15,000 black and Latinos in local office in 2000, almost 50% of these elected officials were the sole brown face at the table². Moreover, the mechanism by which institutional and contextual variables affect likelihood of election may change – whereas a particular electoral arrangement and large voting pool may be sufficient to overcome the first hurdle, it may be the generation of competitive electoral coalitions (Liu 2001, Browning, Marshall & Tabb 1984), or number of available seats (Marschall, Ruhil & Shah 2008), or the resources available to Latinos (Meier 1993) that pull additional Latino candidates into elected office.

The current body of research has conflated the distinct stages of descriptive representation, and thus we have yet to adequately understand how crossing the initial hurdle of no representation is substantively different than adding additional minorities to legislative bodies. I hypothesize that the first leg of the race – overcoming the hurdles of getting onto the ballot and being elected as the first Latino school board member (minimum representation) – dramatically alters council and school board politics, and thus the factors responsible for the election of a single candidate may be substantively different than those responsible for the election of subsequent candidates (i.e., the extent of representation; see also Marschall, Ruhil and Shah 2008). In other words, the race towards descriptive representation is not an all or nothing game, but rather happens sequentially.

In sum, extant research on Latino descriptive representation in urban America demonstrates two shortcomings – the assumption that models of Black incorporation translate directly to the Latino experience, and a narrowly defined and conceptualized model of representation that obscures more than it reveals. Addressing these limitations thus requires a more comprehensive model of political incorporation, a broader definition of representation, and a methodology that holds true to both the nature of descriptive representation as a head count and a process of representation that occurs in stages.

Data

To test this theory of descriptive representation, I examine the likelihood of Latino school board representation in 2000. Although electoral representation occurs at many levels of government in the United States, with over 10,000 local school boards in place across the United States, this is not only a highly prevalent form of government in the United States but also the most common point of entry into office holding among Latinos (Hardy-Fanta et al. 2005). Among the 3,929 Latino elected officials in the United States in 2000, 42.8% (1,682) serve on school boards (National Association of Latino Elected Officials 2002). The school board often serves as the first rung on the political ladder and it is here that Latinos, much like blacks, gain the expertise and experience to run for higher level offices (Pachon & DeSipio 1992). Thus, an examination of school board elections provides a unique opportunity to examine the politics of Latino incorporation at its broadest level.

Using the school district as the unit of analysis, I investigate Latino representation in a national sample of 1,664 districts that have at least a 5% Latino voting age population, located in 224 metropolitan statistical areas (MSAs) dispersed across 40 states³. I further restricted my sample to elected boards with either pure ward or at-large, elected systems⁴. Figure 1 provides an overview of the distribution of Latino school board members across the United States, as well as the percent of the state's Latino population. My dependent variable is a count of the number of Latino members on the school board, and ranges from 0 to 7 in the sample.

[Figure 1 about Here]

Building upon previous literature, I reevaluate the explanatory leverage provided by the principal explanatory factors in the literature, as well as variables that theoretically should be linked to the emergence of Latino descriptive representation. Given the discussion of the existing literature in the preceding section, I restrict my explanatory focus to such factors that tap institutional structures and segregation, population size and influence, resources

and social/political incorporation.

Institutional factors include a set of dummy variables for the selection method for school boards in the district – *At-Large* or *Ward-based Elections*. As discussed in the preceding section, ward elections are expected to yield more Latino school boards members than at-large elections, albeit conditional on levels of Latino *Segregation* within the district. Specifically, I expect ward-based elections to positively impact the likelihood of Latino representation in those districts with high levels of segregation. Segregation is determined at the census tract level using an index of dissimilarity, which measures the evenness with which two mutually exclusive groups are distributed across the geographic units that make up a larger geographic entity; for example, the distribution of blacks and whites across the census tracts that make up a school district. Its minimum value is zero and its maximum value is 100⁵. Finally, I include a variable that captures *School Board Size* (total number of seats), and I expect that as the opportunities to serve on the board increase, so does the probability of a Latino being elected.

I expect the Latino Population size to matter, but only insofar as there is a large eligible pool of voters within the district. Thus, I include the percentage of the voting age population that is Latino (*Latino VAP*), with the expectation that this will be positively related to the number of Latinos on a school board. On the other hand, I expect a larger district percentage of *Non-Citizen Latinos* to hinder the election of Latinos to school boards⁶. Much as been written recently about the relationship between Latino and black constituents within a district, probing the question of group commonality or competition (see e.g. Marschall 2005, Rocha, Wrinkle & Polinard 2005, Gay 2006, Kaufmann 2003, Rocha 2007, Vaca 2004). In general, the findings suggest a larger black constituency reduces the likelihood of Latino representation, and thus I include a measure of the percent black voting age population (*Black VAP*) to test this hypothesis.

Resource factors have long been included in models for Black representation, and thus I include them, although I am open to the possibility that their effects will be different for

Latino representation. In short, the resource argument implies that the supply of minority candidates is not simply a function of population, but a function of the eligible population in which a candidate may emerge. Thus, Blacks who live in situations where they have a significant disadvantage in terms of monetary and educational resources will have lower likelihoods of competing with Whites for elected positions. Scholars found that education levels and wealth are positively related to Black representation (Engstrom & McDonald 1986, Karnig & Welch 1980) and more recently, that these indicators are significant even after controlling for institutional factors and racial demographics (Canon 1999, Lublin 1997, Meier et al. 2005). To assess this relationship for Latino representation, I include the percentage of Latinos with a Bachelors degree (*Latino BA*) and the Latino median family income (*Latino MFI*) for the district.

Lastly, I include variables that capture the importance of geographic location in determining likelihood of representation. Figure 1 illustrates the heterogeneous distribution of Latinos and Latino representation across the United States, and confirms that Latino representation is markedly concentrated in a few states and cities. Yet, the probability of Latino representation in other, less concentrated locations is still an empirical question. Therefore I control for differences in political and social assimilation by utilizing patterns of Latino immigrant and settlement patterns as a proxy⁷. Borrowing from demographers, I categorize each state as either a *Traditional Latino* destination, a *New Latino* destination, or a *Non-Latino* destination (Chapa & de la Rosa 2004)). Therefore, compared to New and Non-Latino destinations, I expect more Latino school board representation in traditional destinations. I also control for *Urban* school districts, which have historically housed more Latinos than rural districts, and the size of the district (*Log of Population*). Table 1 provides the descriptive statistics for the full sample (n=1,664 school districts), and the districts with representation (n=218) in my analysis (see appendix for summary statistics of districts without representation, and additional discussion).

[Table 1 about Here]

An Alternative Methodological Strategy

I hypothesize that the process of Latino descriptive representation is a phased event in which the first step requires overcoming the hurdle of attaining minimum (here defined as one Latino) representation. Once this threshold is overcome, I hypothesize that the politics of representation change, and thus expect the extent of representation to potentially be explained by different factors.

In order to model this phased event, I utilize a hurdle negative binomial model⁸. A hurdle model is “a modified count model in which the two processes generating the zeros and the positives are not constrained to be the same” (Cameron & Trivedi 1998, King 1989, Zorn 1998). Further, as Mullahy (1986) explains, “The idea underlying the hurdle formulations is that a binomial probability model governs the binary outcome of whether a count variate has a zero or a positive realization. If the realization is positive, the ‘hurdle is crossed’, and the conditional distribution of the positives is governed by a truncated-at-zero count data model” (p. 345). Thus I estimate two equations. The first predicts the probability of seeing any Latino school board representation, and thus yields an empirical estimate of factors related to the threshold or tipping point that must be overcome for a school board to move from no representation to at least a single Latino board member (*minimum representation*). The second predicts the expected number of Latino school boards members conditional upon the explanatory variables specified. In other words, the fundamental question answered by the second equation is this: Once the initial hurdle has been overcome and Latinos are represented, what factors explain the *extent of representation*?

Analysis and Findings

Minimum Representation

Table 2 provides the results of each step of the hurdle model: column 1 presents the results from the binary outcome (logit estimates), and column 2 presents the results from a truncated count model (zero-truncated poisson). I begin with a discussion of stage 1: minimum representation. Calculating the probability of representation confirms the empirical observation that Latino school board representation is indeed a rare event: with all explanatory variables at their mean, the probability is practically zero $(0.05)^9$. Further, the extremely low probability of any representation supports my earlier arguments that models solely looking at variables such as electoral structure and voting strength may overestimate the effects of these two factors in determining representation. Instead, and as the results enumerated in Table 2 show, the ability to cross this first hurdle depends upon a number of institutional and contextual factors.

[Table 2 about Here]

First, ward-based elections in and of themselves hinder the election of a single Latino school board members - the probability of having a single Latino representative decreases 44% in jurisdictions with ward (versus at-large) elections. At first glance, then, these results support research that has found ward elections to be detrimental to Latino representation (Meier et al. 2005, Leal 2004). However, these effects dissipate when we consider the level of segregation within districts, as illustrated in Figure 2.

[Figure 2 about Here]

Once a district has a black-Latino index of dissimilarity of around 30, Latinos in school districts with ward-based elections are more likely to attain office than those with at-large elections. Moreover, it is levels of black-Latino segregation, rather than white-Latino segregation, that result in a higher likelihood of Latino representation. Given the large number

of black and Latino students in public schools, and that school board positions have often served as the first rung of electoral ambition for both blacks and Latinos, these results are not surprising, and support previous work that has found higher levels of cooperation among Latino and whites than Latinos and blacks (Dyer, Vedlitz & Worchel 1989). Thus, although the probabilities of any representation remain low, this analysis demonstrates that the ability of an electoral arrangement to strengthen Latino voting power depends heavily on the levels of Black/Latino segregation within a district.

How do a school district's racial demographics impact the likelihood of Latino representation? As expected, a larger Latino voting age population significantly increases the probability of any Latino on the school board, tempered by the number of Latino non-citizens within the district. Moreover, these effects are conditioned by method of election and segregation. For example, school districts with a mean Latino VAP of 22% (the average for the sample), have a 2.5 % probability of electing a Latino school board member if they use ward systems, compared to a 5.8% probability if they use at-large systems. However, higher levels of Black-Latino segregation reverse the relative positions of ward and at-large systems. With a Black-Latino index of dissimilarity of 45, the probability of representation is 6% for at-large elections, and 9.4% for ward elections. At the same time, the proportion of the Latino population ineligible to participate in electoral politics reduces the chances of electing any Latino representation. A one standard deviation increase in the proportion of non-citizens (to 40%) reduces the likelihood of representation by half.

Contrary to my expectations regarding the size of the board, I find that increasing the opportunities for representation (i.e. larger school boards) decreases the probability of Latino representation. This finding is surprising but may be an artifact of the variation in school board size across the United States. In particular, board size is loosely correlated with population size: school boards with three seats were found in districts with an average population of 5,000 residents, whereas school boards with five seats were found in districts with an average population of 33,000 residents. Thus, it may be that greater representation

on smaller school boards is a function of the ability of voters to organize around a single candidate (i.e. fewer options), and candidates ability to more effectively mobilize voters.

The results for the resource variables are also contrary to those expected from the literature on black representation. Specifically, I find that a unit standard deviation increase in the Latino median family income in a district (to \$57,000) results in a 50% decrease in the likelihood of any Latino representation (from 0.033 to 0.016). Similarly, a unit standard deviation increase in the proportion of the Latino electorate with a Bachelor's degree reduces the likelihood of representation by 66%. What explains these results? The counterintuitive findings regarding the resource variables could be a function of social incorporation wherein either wealthier and more educated Latinos mirror their white counterparts and participate less in school politics than in other elections (Howell 2005), or are less likely to vote along ethnic lines. To be sure, my results could also stem from Latinos with more resources holding higher ambitions for elected office and hence skipping this first rung (school boards) altogether (see also Bositis 2002).

Lastly, I find evidence of significant differences based on levels of assimilation and incorporation. To reiterate, the dummy variables of traditional and new destinations were included in the model as blunt approximations of generational diversity, assimilation and acculturation, and familiarity with political incorporation. As expected, those districts in traditional destinations are more likely to have Latino representation. Specifically, the probability of any representation in a school district located in a traditional destination is 0.034, as opposed to 0.012 in a new destination.

Extent of Representation

The crux of my theory of descriptive representation rests on the notion that the politics of getting to the table changes once minimum representation is achieved. Column 2 in Table 3 reports the results from the zero-truncated poisson model, which provides estimates of how each of the independent variables impact the *actual number* of Latinos on a school

board (between 1 and 7). The findings from stage 2 suggest that the key differences lie in how the complex racial composition of the district impacts representation. For example, the estimates show that a larger Latino voting age population increases the expected count of Latino representatives, whereas a large non-citizen Latino population decreases the expected count. Specifically, a one standard deviation increase in the Latino VAP (26%) translates into more than one Latino representatives on average, whereas a standard deviation increase in the percentage of the Latino population that are non-citizens (13.3%) decreases the expected number by more than two Latino school board members.

What about the response from the black population? At the first stage, it appears that a large black population does not pose an additional burden on Latino candidates and Latino representation. However, once Latinos have a representative on the school board, the results suggest that there is indeed some backlash from the black community. As illustrated in Figure 3 (corresponding table available in appendix), the expected count of Latino school board members is only significantly greater than 1 when the proportion of the black VAP is less than 50%. Moreover, these effects are attenuated by levels of segregation: small black populations that are more segregated from the Latino population ensure greater representation. Again, the differences between the first and second phases of representation highlight how the impact of contextual factors are really conditioned on the number of Latino representatives already in office, and suggest that previous studies that have examined representation as a one-stage event have missed this important feature.

[Figure 3 about Here]

The story behind the two other movers of representation – electoral structure and population size – are similar for this second stage of representation. Latino candidates in districts with low levels of black-Latino segregation benefit from at-large structures, but that district elections facilitate more representation once the index of dissimilarity index reaches 20. Thus, while the expected count of Latino representatives stays within 2 or 3 for all levels of

segregation in at-large systems, they reach 6 Latino members in districts with almost perfect segregation between the black and Latino populations.

Finally, the results reported in Table 2 support my contention that the levels of political and social assimilation play an important role in determining Latino representation. Recall that in the first stage, the results supported my hypothesis that compared to non-immigrant destination, Latino candidates in traditional destinations fare better at overcoming the hurdle. In the second stage, I find that the real difference involves new destinations and non-immigrant destinations. Specifically, *ceteris paribus*, school boards in new destinations have almost two fewer Latino school board members than those in non-immigrant destinations. Given that these destinations have had a very short history of Latino immigration, these results may suggest that communities with newly arrived Latinos have not had enough time to incorporate them into political life, or that non-Latinos have organized against Latino representation.

Conclusions and Policy Implications

So how do minorities win the race to representation? The analysis presented here indicates that the answer to this question depends in part on whether a district is achieving minimum representation (i.e. a single Latino school board member), or adding additional members. In the first stage, electoral structure and voting strength matter, but how they do so depends largely on the geographical distribution of Latinos within a school district. In particular, the ability of a district to achieve minimum representation appears to be dependent on selection method, but only when in conjunction with higher levels of black-Latino segregation within a district. Further, I find support for my argument that assimilation and incorporation factors impact the overall strength of the Latino population. In particular, districts in locales that have had a longer history of Latino immigration, more second- and third-generation Latinos, and more experience with the American political process are more likely to overcome this

first hurdle of electing a single Latino representative.

Once a district has achieved minimum representation, the models examining the extent of representation point to distinct demographic features within the district as the driving force behind increasing the number of Latino school board members. Specifically, I find that a large Latino voting age population increases the expected count of Latino school board members, but that the impact of this population is dampened by a large non-citizen population, and competition among the black population. Moreover, I again find that the level of political and social assimilation of the Latino population is also a good predictor of the extent of representation. Those districts in traditional destinations have greater voter and candidate strength because of their second and third-generation populations and their experience with American politics.

In addition, these results provide some important markers for subsequent research. First, models developed to explain black descriptive representation may be unable to explain the Latino experience precisely because these models are incomplete. As I have demonstrated, the incorporation of Latinos into the political arena does share some characteristics with black incorporation, such as board selection methods and size of the Latino population, but issues of immigration and assimilation pose additional challenges that must be addressed. Consistently, I found that the influence of the Latino voting age population is diminished by a large Latino non-citizen population and that the variation in representation can partly be explained by levels of Latino political and social assimilation within a district. Thus, models that do no account or control for these more nuanced effects of racial demographics may underestimate the role of Latino population on representation.

Second, the majority of research has utilized a restrictive proportionality definition of descriptive representation that neglects the inherent process of representation. As I hypothesized, the politics surrounding the election of a single Latino school board member may be substantially different from that surrounding the election of subsequent members. Minority candidates are not elected “proportionally,” but rather one at a time, and understanding

how the politics of descriptive representation change at the different stages of incorporation are especially salient as we move towards more multi-racial and ethnic legislative bodies. Moreover, these findings support efforts to create comprehensive large data bases of local elections across the United States that reflect the full diversity of representation.

Although I have restricted my analysis to Latino representation on school boards, these findings also have more broad policy implications. First, my findings contradict current normative claims of the divisive effects of continued racial segregation in most places across the country, and the prospects of “rainbow coalitions” in developing minority voting blocs or representatives. In particular, they demonstrate the unique tradeoff between the negative consequences stemming from segregation (on education, housing, economic development, and social mobility for example) and the positive effects that flow from increased minority representation. Indeed, recent state and local legislation has moved towards using residential segregation patterns to draw school boundaries, with the explicit intent of moving towards increased minority representation, participation and substantive influence (see e.g. Omaha School District legislation LB 1024, May 2007). Insofar as this is indicative of a trend or preference, my results indicate that continued intra-minority segregation may be key in ensuring minority political incorporation at all levels of government.

Further, the results regarding Latino school board representation suggest that a continued reliance on ward-based elections as the structural solution to voter dilution may be misplaced. Indeed, depending on the demographic context of a district, at-large elections may be better suited to increase the likelihood of Latino representation. The results again highlight the basic premise that theories, models and policy solutions based on a black-white dichotomy cannot be wholly translated to racially heterogeneous communities, cities and districts. Rather than looking to electoral structures, the findings presented here point to changes in who can vote as a key component in increasing Latino representation. Relaxing citizenship rules in particular have long been a contentious issue for local elections (Hayduk 2004, Kini 2005), but as the US immigrant demography continues to shift, the

rights and roles of non-citizens have become important topics in state elections as well. And while the policy initiatives addressing non-citizen voting may be most salient in the areas of the US that have and continue to witness large increases in foreign-born populations, the rise of new destinations portends the need to address the rights of non-citizens on a national level.

These findings additionally highlight the fluid and dynamic nature of competition and commonality among blacks and Latinos at the local level. Concurrent with other works (Rocha 2007, Gay 2006), this research suggests that when and how minority groups come together varies with understandings of the outcomes of this cooperation. In instances of no minority representation, blacks and Latinos may recognize their shared subordination to white governance. But once Latinos are in office, the struggle for power on a school board seems to shift, and ultimately pits Latinos against blacks for power.

Lastly, the evidence presented here points to several future directions for scholarship on race and representation. In particular, what or who encourages Latinos to run for office in the first place? Others have examined the concept of candidate emergence and its relationship to gender (Fox & Lawless 2005), but none have investigated this process for racial minorities. Are organizations and leadership important factors? How does the changing, racially heterogeneous nature of local cities and school districts impact the likelihood of Latinos running? How and under what circumstances do term limits and voting patterns impact representation? Future research must incorporate these factors and expand the foundation of urban scholarship on race and representation.

Appendix

As was noted by an observant reviewer, there are school districts with few Latinos (less than 10%) with Latino representation, and school districts with many Latinos (greater than 75%) with no Latino school board members, skewing the means for these two samples, and

Table A1: Additional Descriptive Statistics without Latino Representation

	Sample without Latino Representation ($n = 1446$)		
	Mean	Std. Dev.	Range
Ward Elections (=1)	0.23	0.42	(0,1)
At-large Elections (=1)	0.76	0.42	(0,1)
Index of Dissimilarity, white-Latino	16.06	15.99	(0,91)
Index of Dissimilarity, black-Latino	19.04	16.77	(0,100)
Latino Voting Age Population (%)	17.17	14.05	(5,96)
Latino Non-Citizens (%)	25.74	15.19	(0,100)
Black Voting Age Population (%)	5.14	9.67	(0,81)
Traditional Destination (=1)	0.86	0.34	(0,1)
New Destination (=1)	0.07	0.26	(0,1)
Other Destination (=1)	0.06	0.23	(0,1)
School Board Size (# seats)	6.23	1.51	(2,12)
Latino Median Family Income (\$k)	42.65	17.27	(0,200)
Latino with Bachelors Degree (%)	9.30	9.30	(0,100)
Urban District (=1)	0.75	0.43	(0,1)
District Population (logged)	9.54	1.62	(3,16)

perhaps the results. Conceptually, the school districts with few Latinos is less problematic – given that these models do not capture every possible scenario in which a person is elected to a school board, it is not so surprising that there were 9 school districts in the U.S. with less than a 10% Latino voting age population and Latino representation on the board (see also Figure 1: there are several states with small overall Latino populations that have one Latino school board member). The school districts with large Latino populations and no representation highlight the issue of relying solely on minority elected official rosters to determine extent of representation. The National Association of Latino Elected and Appointed Officials (NALEO) takes a survey of school boards across the country to create its Directory of Latino Elected Officials, but there is no way to know if those locations not included in the directory have no representation, or did not fill out the survey. In this analysis, there are 7 school boards with greater than 75% Latino VAP without representation, all in California. Additional models were run without these outliers, and the results remain robust. Models and data available from author.

Table A2: Expected Count of Latino School Board Members,
 Conditional on Black VAP and Black-Latino Segregation (for Figure 3)

	Black-Latino Segregation Level		
Black VAP	68	48	28
0	2.27	1.73	1.42
10	1.99	1.57	1.34
20	1.78	1.45	1.27
30	1.61	1.36	1.21
40	1.48	1.29	1.17
50	1.38	1.23	1.14
60	1.30	1.18	1.11
70	1.24	1.15	1.09
80	1.19	1.12	1.07
90	1.16	1.09	1.06
100	1.13	1.08	1.05

Note: Mean Black-Latino Segregation=28, +1SD=48, +2SD=68.

Predicted probabilities calculated with all categorical variables at mode
 (at-large, traditional destinations and Urban=1; Board size=7), all else at mean.

Notes

¹See McClain and Garcia (1993) for a summary of these methodological limitations.

²Local office includes city council and school board members. Data was provided by the Joint Center for Political and Economic Studies (Black Elected Officials Roster), and the National Association of Latino Elected Officials (Latino Roster) for 2000.

³Other recent studies have focused on school board representation and Latinos, but these data have either been restricted to one state (Meier et al. 2005) or a national sample of larger school districts (Leal 2004). Data for this project comes from an original project investigating the policy implications of Latino representation in education, and included collecting information from the National Association of School Boards, district websites and phone calls to individual school districts. In all, information on 10,995 school districts in 46 states was collected. This data was then merged with representation data from NALEO, Census 2000 data, and segregation data from the Lewis Mumford Center for Comparative Urban and Regional Research, yielding an effective sample of 4510 school districts in 40 states, excluding Alaska, Arkansas, Hawaii, Idaho, Kentucky, Nevada, North Dakota, South Dakota, Vermont, and Wyoming. None of the excluded school districts had Latino representation in 2000. In addition, the multiple school boards in Chicago (Local School Councils) and New York City (District Councils) were excluded from the sample.

⁴Less than 2% of the districts in my sample had appointed school boards, and less than 3% used a mixed method of election.

⁵Index of Dissimilarity = $\frac{1}{2} \sum (a_i/A) - (b_i/B)$, where a_i is one racial group's population in the census tract, and A is that racial groups total population within the school district, and b_i is another racial group's population in the census tract, and B is the total population of racial group B within the school district.

⁶A single measure of Latino citizens of voting age would have been most appropriate. However, this data is not currently available at the school district level

⁷Although this is a blunt measure of assimilation and incorporation, it does control for the distribution and history of Latino populations better than other measures, such as census regions and divisions.

⁸Other two-stage model specifications, including the zero-inflated negative binomial (ZINB) model, were tested but rejected in favor of the hurdle model for both theoretical and methodological reasons. Theoretically, the estimator should be capable of modeling the two-stages as distinct processes in which once the hurdle of any representation was overcome, realization of a Latino presence on the school board is realized as a non-negative integer. Because the hurdle model can be estimated as two separate model (a binary model and a count model), a more complete estimation of the determinants of representation could be included (McDowell 2003).

⁹Unless otherwise noted, all predicted probabilities are calculated with categorical variables at mode (at-large, urban, and traditional destinations =1; school board size=7), all else at mean. Predictions calculated using SPost (Long & Freese 2006).

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Table 1: Summary Statistics of School Districts in Sample

	Full Sample ($n = 1664$)			Sample With Latino Representation ($n = 218$)		
	Mean	Std. Dev.	Range	Mean	Std. Dev.	Range
# Latino School Board Members (DV)	0.36	1.17	(0,7)	2.78	1.94	(1,7)
Ward Elections (=1)	0.25	0.43	(0,1)	0.31	0.46	(0,1)
At-large Elections (=1)	0.75	0.43	(0,1)	0.69	0.46	(0,1)
Index of Dissimilarity, white-Latino	17.16	16.51	(0, 92)	24.30	18.08	(0, 77)
Index of Dissimilarity, black-Latino	20.25	17.47	(0,100)	28.28	19.77	(0, 90)
Latino Voting Age Population (%)	22.27	20.64	(5, 99)	53.32	26.42	(5, 99)
Latino Non-Citizens (%)	25.68	14.96	(0,100)	25.23	13.37	(0,62.5)
Black Voting Age Population (%)	5.15	9.50	(0, 81)	5.16	8.27	(0,71)
Traditional Destination (=1)	0.88	0.33	(0,1)	0.97	0.17	(0,1)
New Destination (=1)	0.07	0.25	(0,1)	0.01	0.09	(0,1)
Other Destination (=1)	0.06	0.23	(0,1)	0.02	0.14	(0,1)
School Board Size (# seats)	6.21	1.49	(2,12)	6.07	1.32	(3,11)
Latino Median Family Income (\$k)	41.42	16.80	(0,200)	33.24	9.92	(17,69)
Latino with Bachelors Degree (%)	8.68	8.92	(0, 100)	4.55	3.70	(0,22)
Urban District (=1)	0.77	0.42	(0,1)	0.89	0.32	(0,1)
District Population (logged)	9.64	1.64	(3,16)	10.25	1.62	(5,16)

Table 2: Hurdle Model Estimates of Latino Descriptive Representation

Dependent Variable = Number of Latino school Board Members		
	Stage 1 Logit	Stage 2 ZTP
Ward Elections	-0.868** (0.393)	-0.382 (0.217)
Percent Latino Voting Age Population	.017*** (0.003)	.010** (0.004)
Percent black Voting Age Population	0.008 (0.009)	-.021* (0.009)
White-Latino Segregation	0.003 (0.009)	-0.005 (0.005)
Black-Latino Segregation	0.009 (0.006)	0.004 (0.004)
Ward*White-Latino Segregation	-0.008 (0.013)	-0.005 (0.006)
Ward*Black-Latino Segregation	0.030* (0.012)	0.019*** (0.005)
School Board Size	-0.304*** (0.085)	-0.045 (0.055)
Latino Median Family Income	-0.042*** (0.009)	-0.027** (0.009)
Percent Latino with Bachelors Degree	-0.111*** (0.025)	-0.038 (0.027)
Percent Latino Non-citizens	-0.020** (0.007)	-0.013*** (0.004)
Traditional Destination	1.045* (0.471)	1.419 (0.931)
New Destination	-1.135 (0.849)	-12.306*** (1.203)
Urban District	1.089*** (0.280)	0.208 (0.234)
District Population (logged)	0.453*** (0.088)	0.043 (0.063)
Constant	-4.612*** (1.023)	-0.126 (1.134)
N	1664	218
χ^2	223.666	565.396
AIC	1011.079	668.637
BIC	1097.750	722.789

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: Robust standard errors reported in parentheses.

Note: At-large elections and Other Destinations reference categories.

Figure 1: Distribution of the Latino Population and Latino School Board Members

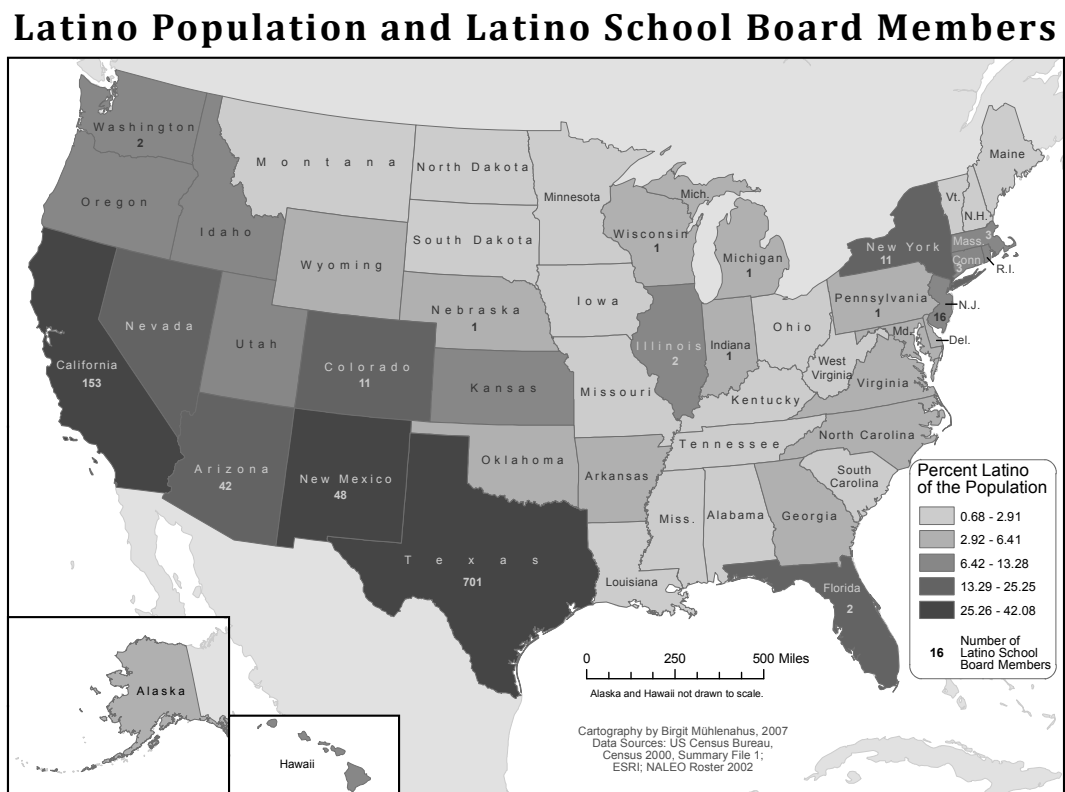
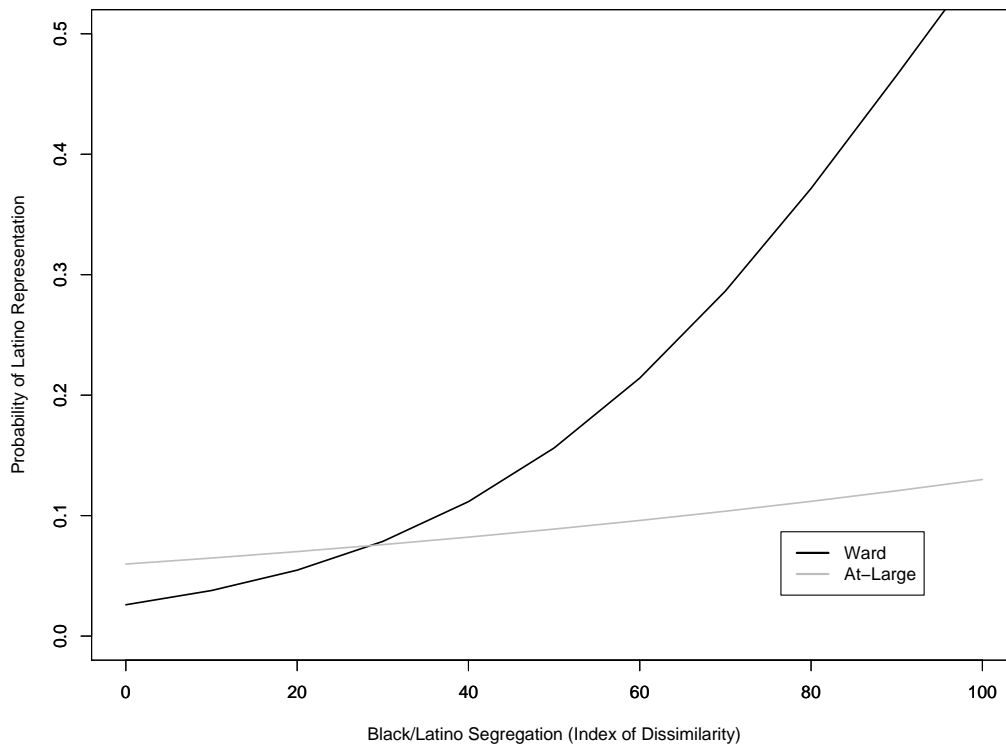
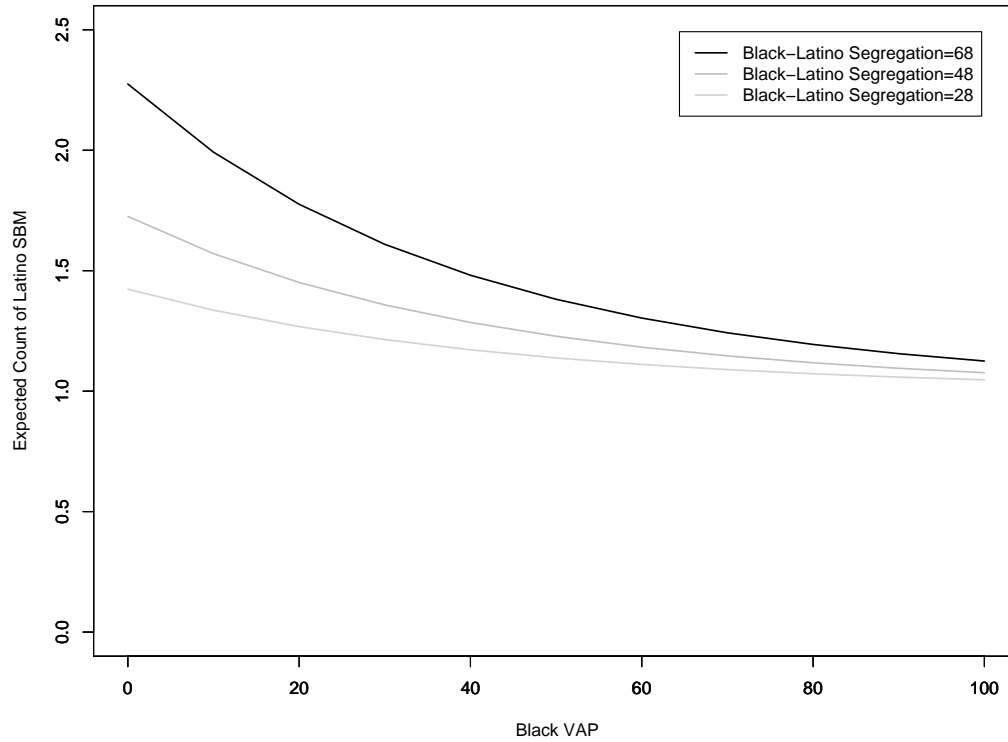


Figure 2: Effects of Electoral Structure, Conditional on Segregation



Note: Predicted probabilities calculated with all categorical variables at mode (at-large, traditional destinations and Urban=1; Board size=7), all else at mean.

Figure 3: Expected Number of Latino School Board Members
Conditional on Black VAP and Black-Latino Segregation



Note: Predicted probabilities calculated with all categorical variables at mode (at-large, traditional destinations and Urban=1, Board size=7), all else at mean. Mean Black-Latino Segregation= 28, +1 Std. Dev.= 48, +2 Std. Dev.=68