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Desvinculado y Desigual: Is Segregation Harmful to Latinos?

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Abstract: Despite the high levels of metropolitan area segregation experienced by Latinos, there is a lack of research examining the effects of segregation on Latino socio-economic outcomes and whether those effects differ from the negative effects documented for African Americans. We find that segregation is consistently associated with lower levels of educational attainment and labor market success for both African-American and Latino young adults compared to whites, with associations of similar magnitudes for both groups. One mechanism through which segregation may influence outcomes is the difference in the levels of neighborhood human capital to which whites, Latinos, and African Americans are exposed. We find that higher levels of segregation are associated with lower black and Latino neighborhood exposure to residents with college degrees, relative to whites. We also find support for other commonly-discussed mechanisms, such as exposure to neighborhood violent crime and the relative proficiency of the closest public school.

Keywords: segregation, inequality, stratification, racial and ethnic disparities.

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I. Introduction

In the 20th Century, the Great Migration transformed the United States as millions of African Americans left the rural South and remade the nation's cities. The growth of the U.S. Latino population is provoking a similar transformation in the 21st Century. Between 1970 and 2010, the Latino population grew from 8 million to more than 45 million, most of whom live in the nation's largest metropolitan areas.

During the Great Migration, both de jure and de facto segregation policies severely constrained the options of African-American migrants, steering them into segregated housing and labor markets and contributing to what the Kerner Commission in 1968 described as a nation "moving toward two societies, one black, one white—separate and unequal." Although levels of black-white residential segregation have decreased from their 1968 levels, they remain high, and evidence suggests that segregation continues to produce separate and unequal access to resources, such as schools or jobs, and exposure to hazards, such as violence or environmental risks. As the Latino population continues to grow, Latinos seem to be inheriting the segregated urban structures experienced by African Americans. As metropolitan area levels of segregation for Latinos increase toward the levels observed for African Americans, to what extent are the effects of segregation similar or different for the two groups?

Previous studies of black-white segregation have found that higher levels of segregation lead to worse health, educational, and socio-economic outcomes for African Americans (Cutler and Glaeser 1997; Ellen 2000; Card and Rothstein 2007), but we know much less about the effects that residential segregation has on socio-economic outcomes for Latinos. On the one hand, there are some reasons to think that segregation could have comparable or even worse effects on Latinos. For instance, if we assume that one mechanism through which segregated

metropolitan areas affect individual outcomes is by reducing average levels of neighbors' human capital, then the low levels of mean educational attainment and occupational status in predominantly Latino neighborhoods suggest segregation could significantly undermine the life chances of Latinos. On the other hand, largely Latino neighborhoods boast higher levels of employment than largely black neighborhoods and may offer enclave economies that help co-ethnic workers find jobs and build skills and experience (Portes and Shafer 2007).[1] Consistent with higher employment rates and potential enclave effects, Latino neighborhoods may not have suffered the same level of disinvestment as largely black neighborhoods (Small and McDermott 2006; Wilson 1991). Finally, largely Latino neighborhoods tend to have lower levels of violent crime than largely black neighborhoods (De la Roca, Ellen, and O'Regan 2014).

Compared to the extensive literature on changing patterns (Park and Iceland 2011; Logan and Turner 2013; Tienda and Fuentes 2014) and causes of Latino segregation (Bayer, McMillan, and Rueben 2004; Iceland and Nelson 2008; Rugh and Massey 2013), there is far less research that studies how metropolitan area segregation levels affect Latinos, and how those effects differ from those for African Americans. We address this gap by exploring how levels of metropolitan area segregation relate to the socioeconomic outcomes of young, native-born Latinos and how those associations differ from those for African Americans. We also examine the relevance of several key mechanisms that may drive the relationship between residential segregation and individual outcomes.

II. Changing dynamics of segregation

Although African Americans have historically been far more segregated than other minority groups, Latino-white and black-white segregation levels began to converge between 1980 and 2010. Black-white dissimilarity declined consistently between 1980 and 2010, while

Latino-white dissimilarity remained relatively steady.[2] By 2010, black-white segregation still

surpassed Latino-white segregation, but the difference was far smaller than it had been three

decades earlier (De la Roca, Ellen and O'Regan 2014). Although Latino isolation (that is, the

share of Latino residents in the neighborhood where the average Latino lives) has risen less

rapidly than Latinos' quickly rising share of the population, average levels of Latino isolation

have still risen substantially and matched average levels of African American isolation in 2010.[3]

Over this time period, African American isolation declined from 0.61 to 0.46 while Latino

isolation rose from 0.38 to 0.46 (De la Roca, Ellen and O'Regan 2014).

III. How does segregation matter?

Segregation can affect the outcomes of individuals by constraining residential options

and shaping the characteristics of the population and the quality of the resources and services

available in the neighborhoods in which individuals live. To be clear, ethnic concentration is not

inherently harmful; the effects of segregation may vary significantly by the political and socio-

economic context of concentration. Below we explore several potential avenues through which

segregation may affect individual outcomes.

A. Human capital

Residential segregation can lead to large disparities in levels of neighborhood human

capital, which may be critical to youth outcomes. Wilson (1997) argues that the educational and

lifetime experiences of adult residents in a neighborhood can powerfully affect the outcomes of

youth by shaping their access to conventional role models and the mainstream social networks

that facilitate social and economic advancement. Recent research on black-white segregation

supports Wilson's theory about neighborhood human capital and social isolation, finding that

increases in the proportion of college-educated African-American adults in the metropolitan area

significantly reduce the negative effects of segregation on black youths' educational attainment (Bayer, Fang, and McMillan 2014).

Similar dynamics have been identified in the experiences of immigrants and their children. The educational attainment of the children of immigrants has been found to depend not only on their parents' educational attainment but also on the mean attainment of co-ethnics in the parents' generation, and particularly the mean educational attainment of co-ethnics residing in the same neighborhood (Borjas 1995). Recent research on the labor market experiences of the foreign born comes to similar conclusions, finding that segregation among a highly educated ethnic group is economically beneficial, while segregation among an ethnic group with below average educational attainment leads to lower employment rates and earnings (Cutler, Glaeser, and Vigdor 2008).

B. Ethnic enclaves

Some scholars have emphasized that spatial clustering among co-ethnics can create supportive enclaves, especially in largely immigrant neighborhoods where the shared experience of immigrant origins reinforces social ties (Wilson and Portes 1980; Light and Bonacich 1988). For entrepreneurs, ethnic enclaves can simultaneously create a market for ethnic goods, a readily available pool of committed labor, and access to co-ethnic sources of capital (Portes and Sensenbrenner 1993). Group members with low levels of human or financial capital can in theory find employment more easily in enclaves despite low levels of English proficiency or formal education, and those with higher levels of education may be able to find jobs that are more commensurate with their skills or more easily access capital to start their own business than in mainstream labor and capital markets.

Scholars have critiqued the enclave thesis on various grounds, including pointing out that while ethnic enclaves may benefit entrepreneurs and business owners who can access capital and co-ethnic labor, enclaves may not benefit workers who end up exploited by co-ethnic employers and trapped in low-paying jobs (Sanders and Nee 1992; see also Wilson 1997; Logan, Alba, and Stults 2003). Still, existing research provides some support for the notion that residence in an enclave can improve labor market outcomes, even for unskilled immigrants (Edin, Fredriksson, and Åslund 2003; Portes and Shafer 2007).

C. Public services

The quality of life in a neighborhood is profoundly shaped by the availability and the quality of public services that are delivered, from schooling to public safety to sanitation. Residential segregation may affect individual outcomes by contributing to unequal access to crucial municipal services. In the education context, poorly performing local schools reduce the likelihood that local children will have the foundation necessary to maximize their educational attainment or labor market potential.

D. Institutional density

Segregation may also shape outcomes through effects on institutional density. Recent scholarship on urban inequality has highlighted the importance of local institutions and the way that they structure life in disadvantaged neighborhoods, potentially fostering access to local and extra-local resources and creating neighborhood-level collective efficacy (Marwell 2007; Small 2009; Sampson 2012). Neighborhood institutions, such as community organizations or childcare centers, serve as resource brokers, with networks to private employers and public agencies that enable these institutions to connect residents to schools and to jobs, and to provide resources that can support educational attainment, employment, and parenting (Small 2009). The neighborhood

benefits of institutions can extend to private businesses as well, through their contribution to neighborhood vitality and informal social control (Small and McDermott 2006).

E. Violence

Another way in which segregation may have an effect on individuals is through shaping exposure to neighborhood violence. Sharkey, Schwartz, Ellen and Lacoe (2014) find that exposure to neighborhood violence affects children's academic performance. Indeed, Harding (2009) estimates that neighborhood violent crime rates account for half of the association between neighborhood disadvantage and high school graduation.

F. Weighing the mechanisms together

These mechanisms may not disadvantage Latinos and African Americans equally. For example, if segregation affects the socio-economic outcomes of youth through shaping exposure to neighborhood levels of human capital, then given the lower levels of human capital in predominantly Latino neighborhoods we would expect segregation to have a larger negative effect on Latino socioeconomic outcomes. Although there is significant variation among Latinos in mean human capital levels by ancestry group, recent high levels of immigration by those with comparatively low mean educational levels mean that predominantly Latino neighborhoods on average have lower levels of educational attainment than largely black neighborhoods.[4]

Other mechanisms, however, suggest greater disadvantage for predominantly black neighborhoods. To the extent that enclave effects may reduce the harms of segregation or even create benefits for individual outcomes, they may then be more likely to benefit Latinos who live among a higher proportion of foreign-born residents and in neighborhoods with higher employment rates.[5]

To the extent that segregation matters through its relationship with the quality of local public services, then the long history of unequal public investment in predominantly black neighborhoods suggests that segregation may thus have a larger effect on African Americans than Latinos. Further, Wilson (1991: 654-655) has suggested that disinvestment from predominantly African-American neighborhoods has "sapped the vitality of local businesses and other institutions" and thus isolated neighborhood residents further. Although there is little research on institutional density in Latino neighborhoods, if we assume that predominantly Latino neighborhoods have not experienced the same disinvestment and isolation as predominantly black neighborhoods, then any effect segregation has on individual outcomes through exposure to local institutional density would be expected to be greater for African Americans than Latinos. Finally, to the extent that segregation affects individual outcomes through its relationship with exposure to violence, we would expect segregation to have a larger effect on African Americans than Latinos because of the greater levels of violence to which black residents are exposed in segregated metropolitan areas.

IV. Data and empirical approach

To examine individual socio-economic outcomes and relate them to levels of segregation in the metropolitan area, we utilize public-use micro data gathered by the U.S. Census and provided by IPUMS-USA of the University of Minnesota Population Center. We focus our analysis on data from the American Community Survey 5-year estimate (2007-2011) to study the relationship between residential segregation and socio-economic outcomes of native-born individuals between the ages of 20 and 30. We consider an array of educational (probability of high school and college graduation), labor market (earnings and likelihood of being idle) and social outcomes (likelihood of being a single mother). We exclude the foreign born because the

data do not provide precise information on their year of arrival and, hence, we cannot tell how

long they have experienced segregation. We base our empirical analysis on data for individuals

from 199 Core Based Statistical Areas (CBSA) across the United States with a total population

greater than 100,000 residents. In addition, because small black or Latino populations can lead

to misleading segregation scores, a metropolitan area must have at least 5,000 Latino residents to

be included in the white-Latino models and at least 5,000 African-American residents to be

included in the white-black models. Throughout the study, we use both the dissimilarity and

isolation indices to measure segregation.[6] Across the sample, the mean Latino-white

dissimilarity index score is 0.468, with a standard deviation of 0.108, and the mean black-white

dissimilarity index score is 0.579, with a standard deviation of 0.122.[7]

To describe the characteristics of neighborhood residents, we rely on the Neighborhood

Change Database developed by GeoLytics and the Urban Institute, which provides rich data at

the census tract level. We complement this dataset with data from the U.S. Department of

Education to describe the test scores of the local elementary schools nearest to each census tract

for the 2008-2009 school year, relative to other schools in the metropolitan area.[8] For data on

crime, we rely on the National Neighborhood Crime Study, a nationally representative sample of

crime data for 91 U.S. cities, collected by Peterson and Krivo (2000) between the years 1999-

2001. To capture the neighborhood density of business establishments and non-profit

organizations, we employ data from Esri's Business Analyst, which relies on information for

over 12 million licensed businesses assembled by Dun & Bradstreet in 2010. Establishment-

level data are geocoded, which allow us to calculate counts of businesses by census tract.

To investigate how individual outcomes relate to metropolitan area levels of segregation,

we estimate regressions to test if any relationship between segregation and the outcome of

interest persists after controlling for a wide array of metropolitan area variables that could partially account for such relationship. Specifically, in Table 2, we regress an individual outcome, such as the probability of college graduation, on measures of black-white and Latino-white segregation in 2010. We estimate separate models for blacks and Latinos. Following Cutler and Glaser (1997), we let the coefficient on segregation differ for whites and for blacks or Latinos. Therefore, we test whether segregation has a differential effect on blacks and Latinos relative to its effect on whites.

We include several individual variables as controls, including age, gender, a black indicator variable in specifications for blacks and a set of indicator variables for Latino groups of different origin (Mexicans, Puerto Ricans, Dominicans, Cubans, Central Americans, South Americans, and other Latinos) in specifications for Latinos. These Census defined "Hispanic origin" groups exhibit substantial differences in levels of educational attainment, earnings, and potentially unobserved traits that could explain differences in outcomes within the Latino population. By including these ancestry-group indicator variables we can capture a share of the variance in outcomes that can be attributed to the fact that Latinos of specific subgroups, who may be concentrated in different metropolitan areas, bring different backgrounds. We also control for a large set of metropolitan area variables and interact them with a black or Latino indicator variable to let the effects of city characteristics differ for blacks and Latinos as compared to whites. We calculate robust standard errors clustered at the metropolitan area level to account for the fact that all individuals in a given metropolitan area share the same values for metropolitan area controls.

It is worth emphasizing that we measure segregation at the level of the metropolitan area rather than at the level of the neighborhood. We do so in part for theoretical reasons, as we

believe that metropolitan area-level segregation may restrict choices and opportunities even for minorities who live in integrated neighborhoods. But studying segregation at the level of the metropolitan area also offers empirical advantages, as individuals are less likely to select into a particular metropolitan area than into a neighborhood based on their tastes, preferences, and unobserved resources. Although the research design focusing on metropolitan areas eliminates error that could be introduced by more highly educated or economically successful individuals choosing to reside in certain neighborhoods within a metropolitan area, selective migration among metropolitan areas may still occur, with less successful minority adults sorting into more segregated cities. We have limited ability to control for sorting among metropolitan areas and we do not know the exact length of time an individual in the sample has been exposed to a particular level of segregation. We try to address these concerns in several ways. First, we restrict the analysis to native-born individuals between 20 and 30 years old, given that their metropolitan area of residence is more likely to be pre-determined by parental location choices. Second, we exclude those individuals who moved across state lines in the previous year to eliminate individuals who are likely to have moved from another CBSA and, hence, were not exposed to the assigned level of segregation.[9] Still, we do not interpret our results as indicating causal relationships.

After examining outcomes, we explore potential mechanisms by analyzing differences in the typical neighborhoods lived in by blacks and Latinos in more and less segregated metropolitan areas. Specifically, we first stratify metropolitan areas into segregation quartiles according to their dissimilarity index: 'very low', 'low', 'high', and 'very high' (the group of metropolitan areas in each quartile of levels of segregation between blacks and whites is different from the group in each quartile of levels of segregation between Latinos and whites). We then

11

calculate weighted averages of neighborhood attributes, such as the share of college-educated residents or the test scores of the local school, to characterize the average neighborhoods lived in by African Americans, Latinos, and whites in a given set of metropolitan areas. The weights in each of these calculations are the number of residents of a given race or ethnicity in a neighborhood divided by the total number of people of that race or ethnicity in the metropolitan areas in that segregation quartile. These exposure rates indicate the degree to which the average person of a particular group is exposed to a given neighborhood characteristic. Through this exercise based on raw associations, we assess the extent to which differences in exposure to neighborhood conditions between whites and blacks or whites and Latinos widen in more segregated metropolitan areas.

V. Results

A. OLS results on the relation between segregation and individual outcomes

Table 1 presents raw correlations between metropolitan area segregation and each of the individual outcomes for young adults. The upper panel shows segregation quartiles based on the 2010 Latino-white dissimilarity index and the lower panel shows quartiles constructed using the 2010 black-white dissimilarity index. Whites exhibit better outcomes than blacks and Latinos across the board: they are more likely to graduate from high school and college, to be employed and to have higher earnings. Further, higher levels of segregation are consistently associated with larger gaps in outcomes between whites and blacks and between whites and Latinos. For African Americans, differences in outcomes relative to whites are consistently larger in 'very high' segregation metropolitan areas than in than in 'very low' segregation metropolitan areas, but the pattern is weaker for the middle quartiles. Differences between white and Latino

outcomes are monotonic, systematically increasing with the level of segregation for every

outcome except single motherhood.

Table 1: Raw correlations between metropolitan segregation and outcomes

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	High school graduation	College graduation	Idleness	Log earnings	Single motherhood
	(1)	(2)	(3)		
A. Whites					
Very low segregation	94.0%	34.6%	11.1%	10.00	13.4%
Low segregation	93.9%	39.9%	9.8%	10.07	12.1%
High segregation	94.4%	40.2%	9.2%	10.10	11.6%
Very high segregation	96.1%	50.9%	7.9%	10.26	8.8%
B. Latinos					
Very low segregation	88.5%	18.0%	12.6%	9.83	21.2%
Low segregation	86.1%	20.5%	13.2%	9.85	24.4%
High segregation	85.9%	18.2%	13.1%	9.85	23.3%
Very high segregation	85.7%	21.8%	12.2%	9.95	23.4%
White-Latino gap (A-B)					
Very low segregation	5.5%	16.7%	-1.5%	0.17	-7.8%
Low segregation	7.9%	19.4%	-3.5%	0.23	-12.3%
High segregation	8.5%	21.9%	-3.9%	0.24	-11.7%
Very high segregation	10.4%	29.1%	-4.4%	0.30	-14.6%
C. Whites					
Very low segregation	94.7%	36.5%	10.5%	10.07	11.8%
Low segregation	94.3%	39.2%	9.5%	10.11	11.4%
High segregation	94.0%	40.4%	9.5%	10.09	12.3%
Very high segregation	95.8%	50.4%	7.9%	10.23	9.5%
D. Blacks					
Very low segregation	88.4%	19.3%	12.6%	9.76	39.8%
Low segregation	88.1%	18.9%	13.0%	9.71	40.5%
High segregation	87.4%	21.8%	12.5%	9.71	41.7%
Very high segregation	88.3%	21.5%	13.4%	9.74	40.7%
White-black gap (C-D)					
Very low segregation	6.3%	17.2%	-2.1%	0.31	-28.0%
Low segregation	6.2%	20.3%	-3.5%	0.40	-29.1%
High segregation	6.6%	18.5%	-3.0%	0.38	-29.4%
Very high segregation	7.5%	28.9%	-5.5%	0.49	-31.2%

Notes: Metropolitan areas are classified into segregation quartiles (very low, low, high and very high) based on their 2010 Latino-white dissimilarity index in the upper panel and on their 2010 black-white dissimilarity index in the lower panel. The data are obtained from the 5-year estimates American Community Survey (ACS) 2007–2011. Samples are restricted to native-born blacks, Latinos and whites between 25 and 30 years old living in metropolitan areas with more than 100,000 residents and 5,000 Latinos or blacks in each panel, accordingly. Individuals who lived in a different state in the previous year are excluded. Idleness is defined as not working and not enrolled in school. The sample for earnings is people who are working, not enrolled in school, and have non-negative earnings. Single motherhood includes only women who are unmarried.

Table 2 presents results from ordinary least squares regressions of each individual outcome on metropolitan area levels of segregation. The first row in each subpanel reports the coefficient on the Latino-white dissimilarity index and the second row in each subpanel reports the interaction between the dissimilarity index and a Latino indicator variable. The sample consists only of whites and Latinos, so the coefficient on the dissimilarity index can be interpreted as the association between Latino-white segregation and white outcomes, while the coefficient on the interaction between the dissimilarity index and the Latino indicator variable shows any difference in the association between segregation and outcomes for Latinos as compared to whites. The next two rows in each subpanel report analogous coefficients on black-white segregation for whites and blacks. We estimate our regressions separately for native-born young adults aged 20-24 in column (1) and aged 25-30 in column (2). We include a large set of metropolitan area level controls, specifically population and median household income, the fraction of the population that is Asian, Latino, black, over 65 years, under 15 years, and unemployed, as well as the share of workers employed in the manufacturing sector, the share of residents with a college degree, and the share of residents in poverty. We interact all these metropolitan area controls with a Latino or black indicator variable to let effects differ for Latinos and blacks as compared to whites. To conserve space, we focus discussion on results for 25-30 year olds. Results are generally similar for the younger group, though somewhat weaker for outcomes such as college graduation and earnings given the larger proportion of the younger sample that are still in college.

Table 2: OLS results on the relation between segregation and individual outcomes

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	Age 20-24	Age 25-30
	(1)	(2)
High school graduation		
Latino-white dissimilarity index	-0.016	-0.010
	(0.024)	(0.023)
Latino-white dissimilarity index × Latino	-0.237	-0.277
	(0.042)***	(0.045)***
Black-white dissimilarity index	-0.005	-0.003
	(0.020)	(0.016)
Black-white dissimilarity index × black	-0.176	-0.114
	(0.044)***	(0.038)***
College graduation		
Latino-white dissimilarity index	0.010	0.106
	(0.041)	(0.076)
Latino-white dissimilarity index × Latino	-0.155	-0.428
	(0.038)***	(0.076)***
Black-white dissimilarity index	0.069	0.149
	(0.036)*	(0.065)**
Black-white dissimilarity index × black	-0.249	-0.397
	(0.040)***	(0.095)***
Idleness		
Latino-white dissimilarity index	-0.046	-0.075
	(0.018)**	(0.018)***
Latino-white dissimilarity index × Latino	0.161	0.153
	(0.030)***	(0.031)***
Black-white dissimilarity index	0.001	-0.014
	(0.016)	(0.017)
Black-white dissimilarity index × black	0.160	0.133
	(0.056)***	(0.048)***
Log earnings		
Latino-white dissimilarity index	0.149	0.170
	(0.086)*	(0.067)**
Latino-white dissimilarity index × Latino	0.007	-0.711
	(0.119)	(0.117)***
Black-white dissimilarity index	-0.164	-0.017
	(0.084)*	(0.065)
Black-white dissimilarity index × black	-0.223	-0.690
	(0.133)*	(0.126)***
Single motherhood		
Latino-white dissimilarity index	0.005	-0.034
	(0.023)	(0.028)
Latino-white dissimilarity index × Latino	0.228	0.391
	(0.058)***	(0.079)***
Black-white dissimilarity index	0.040	0.010
	(0.019)**	(0.023)
Black-white dissimilarity index × black	0.127	0.286
	(0.059)**	(0.057)***

Notes: All specifications include a constant term, census region and age indicators and an indicator variable for females. Specifications for blacks include a black indicator variable and those for Latinos include seven ancestry-group indicator variables (Mexicans, Puerto Ricans, Cubans, Central Americans, Dominicans, South Americans and other Latinos). Coefficients are reported with robust standard errors in parenthesis, which are clustered by metropolitan area. ***, **, and * indicate significance at the 1, 5, and 10 percent levels. Additional controls included for metropolitan areas are log population, log median household income and shares of population that are black, Latino, Asian, over 65 years, under 15 years, unemployed, working in manufacturing, in poverty status and with college degree. These metropolitan area controls are also interacted with a black or Latino indicator variable in each specification accordingly. Samples of metropolitan areas have at least 5,000 residents of a given minority group in order to be included in the specifications for that group. Individuals who lived in a different state in the previous year are excluded.

Results reveal significant associations between metropolitan area segregation levels and individual outcomes for Latinos and African Americans. Starting with the probability of having completed high school, we find that segregation has no significant association with the probability of completing high school for whites, but the interaction coefficients for African Americans and Latinos are negative and significant, indicating that in more segregated metropolitan areas African-American and Latino young adults are relatively less likely to complete high school. Indeed, a one standard deviation increase in the Latino-white dissimilarity index is associated with a decline in the probability of finishing high school of 3 percentage points for Latinos relative to whites (with an overall difference in means between whites and Latinos aged 25-30 of 9.1 percentage points). For African-Americans, a one standard deviation increase in the black-white dissimilarity index is associated with a decline in the probability of completing high school of 1.4 percentage points relative to whites (with an overall difference in means between whites and blacks aged 25-30 of 6.9 percentage points). To be more concrete, for African Americans, a move from Phoenix, with a black-white dissimilarity score of 0.413, to New Orleans, with a black-white dissimilarity score of 0.633, would be associated with a decreased likelihood of high-school graduation compared to whites of roughly 2.4 percent. For Latinos, a move from Las Vegas, with a Latino-white dissimilarity score of 0.420, to Los Angeles, with a Latino-white dissimilarity score of 0.622, would be associated with a decreased likelihood of high-school graduation compared with whites of roughly 5.4 percent. In sum, both native-born Latinos and native-born African Americans are significantly less likely compared to whites to graduate from high school in more segregated metropolitan areas, and the magnitude of the association between segregation and the likelihood of completing high school is greater for Latinos than for African Americans.

Higher levels of metropolitan area segregation are also associated with a reduced likelihood of college completion for Latinos and African Americans. An increase of one standard deviation in segregation lowers the odds of completing college by 4.8 percentage points for blacks and 4.6 percentage points for Latinos relative to white graduation rates (with an overall difference in mean college graduation rates compared to whites of 23.1 for blacks and 23.7 percentage points for Latinos). For African Americans, the move from Phoenix to New Orleans would be associated with an 12 percentage point widening in the gap with white college graduation rates. For Latinos, the move from Las Vegas to Los Angeles would be associated with an 10 percentage point widening in the gap with white college graduation rates.

With regard to the likelihood of being simultaneously out of school and out of work, frequently referred to as idleness, a one standard deviation increase in segregation is associated with a 1.6 percentage point increase in being out of school and out of work for African Americans relative to whites and a 1.7 percentage point increase in being out of school and out of work for Latinos relative to whites. The increase in black-white dissimilarity from Phoenix to New Orleans then is associated with a 3.2 percentage point increase in the likelihood of being out of school and out of work for black 25-30 year olds relative to whites, while the increase in Latino-white dissimilarity from Las Vegas to Los Angeles is associated with a 4.6 percentage point increase in the likelihood of idleness for Latino 25-30 year olds relative to whites.

The association with segregation is perhaps most dramatic for earnings. A one standard deviation increase in segregation is associated with a 7.7 percent decline in earnings for Latinos relative to whites and an 8.4 percent decline in earnings for African Americans relative to whites. Thus the increase in black-white segregation from Phoenix to New Orleans is associated with a 14.8 percent decline in black earnings relative to whites while the increase in Latino-white

segregation from Las Vegas to Los Angeles is associated with a 17.7 percent decline in Latino earnings relative to whites.

In terms of single motherhood, a one standard deviation increase in the segregation index raises the likelihood of being a single mother by 3.5 percentage points for African Americans and by 4.2 percentage points for Latinas relative to whites. The move from Phoenix to New Orleans is thus associated with a 6.1 percentage point increase in the likelihood of single motherhood for African-American women between 25 and 30, while the move from Las Vegas to Los Angeles is associated with an 8.6 percentage point increase in single-motherhood for Latinas between 25 and 30.

In alternative estimations we used the isolation index as our measure of metropolitan area segregation and obtained very similar results. We also assessed a potential lag in the effects of segregation by regressing outcomes in 2010 on 2000 segregation levels.[10] The results again are strikingly similar in both significance and magnitude. In sum, using nationwide individual level data for 2010, our findings indicate that segregation has consistent negative correlations with socio-economic outcomes for both African American and Latino young adults.

B. Potential Mechanisms: Exposure to neighborhood conditions and services

The results above suggest that metropolitan area segregation levels continue to be associated with reductions in educational attainment and labor market success for African Americans and that segregation is associated with diminished outcomes for Latinos that are generally as large or larger than those for blacks. In this section, we explore potential mechanisms that could explain these patterns.

Table 3: Racial gaps in exposure to neighborhood conditions and services

Table 3: Racial gaps in exposure to neighborhood conditions and services

	Very low	Low	High	Very high
Neighborhood residents with B.A.				
White	29.7%	28.3%	30.7%	35.7%
Black	24.0%	20.9%	22.5%	22.4%
White-black gap	*5.7%*	*7.5%*	*8.2%*	*13.3%*
White	26.3%	28.9%	30.3%	36.5%
Latino	23.2%	21.2%	19.4%	21.4%
White-Latino gap	*3.1%*	*7.7%*	*10.9%*	*15.1%*
Neighborhood co-ethnic workers				
White	65.8%	57.1%	65.0%	63.8%
Black	16.6%	17.3%	24.6%	33.0%
White-black gap	*49.2%*	*39.8%*	*40.4%*	*30.8%*
White	65.1%	65.8%	64.5%	63.0%
Latino	8.8%	14.0%	32.0%	34.8%
White-Latino gap	*56.3%*	*51.8%*	*32.6%*	*28.3%*
School proficiency ranking (0-100)				
White	57.0	57.4	57.9	59.0
Black	52.3	46.4	40.6	33.5
White-black gap	*4.7*	*11.0*	*17.3*	*25.6*
White	56.9	56.8	57.6	59.4
Latino	53.0	49.0	47.2	39.4
White-Latino gap	*3.9*	*7.8*	*10.3*	*19.9*
Density of for-profit establishments				
White-black gap: Banks	*0.026*	*0.014*	*0.065*	*0.157*
White-black gap: Pharmacies	*-0.004*	*0.003*	*0.005*	*0.023*
White-black gap: Childcare centers	*-0.201*	*-0.107*	*-0.174*	*-0.178*
White-black gap: Grocery stores	*-0.035*	*-0.061*	*-0.088*	*-0.134*
White-Latino gap: Banks	*0.014*	*0.125*	*0.136*	*0.158*
White-Latino gap: Pharmacies	*-0.012*	*0.044*	*0.038*	*0.016*
White-Latino gap: Childcare centers	*-0.049*	*0.010*	*0.041*	*0.022*
White-Latino gap: Grocery stores	*-0.010*	*-0.054*	*-0.034*	*-0.155*
Density of not-for-profit institutions				
White	1.5	1.6	1.8	1.4
Black	2.4	2.2	2.5	1.9
White-black gap	*0.9*	*0.6*	*0.7*	*0.5*
White	1.9	1.8	1.6	1.4
Latino	1.7	1.4	1.1	1.2
White-Latino gap	*-0.1*	*-0.4*	*-0.5*	*-0.2*
Neighborhood violent crime ranking (0-100)				
White		44.1	40.9	32.3
Black		62.6	68.4	66.2
White-black gap		*-18.5*	*-27.5*	*-33.9*
White		41.3	42.4	34.3
Latino		54.7	55.8	58.6
White-Latino gap		*-13.5*	*-13.5*	*-24.2*

Notes: Units of analysis are neighborhoods or census tracts as in 2010. The samples in the first five panels include metropolitan areas (CBSAs) with more than 1000,000 residents and 5,000 black or Latino residents. The first and second panel use data from the Neighborhood Change Data Base. The third panel uses data from US Department of Education for school year 2008–2009. The fourth panel uses data from Esri's Business Analyst for 2010. Density is the count of establishments or institutions in each tract per 1,000 residents. In the last panel, the sample of crime exposure includes 91 cities in 60 metropolitan areas for 2000. We have pooled categories for 'very low' and 'low' levels of segregation given the small number of metropolitan areas in 'very low' segregation quartile.

1.) <u>Neighborhood human capital</u>

Table 3 highlights the strong negative relationship between Latino segregation and exposure to college-educated neighbors. For African Americans, the gap between white and black exposure to college educated neighbors in low segregation metropolitan areas is 5.7 percentage points, but it rises to 13.3 percentage points in high segregation areas. For Latinos the gap is smaller in low segregation metropolitan areas, at 3.1 percentage points, and nearly quintuples to 15.1 percentage points in high segregation areas. The consistent relationship between segregation and exposure to neighborhood human capital suggests that the significant association between segregation and outcomes for both blacks and Latinos could be attributable in large part to a neighborhood human capital channel.

2.) <u>Enclave effects</u>

To explore the role of enclave effects in explaining the effects of segregation, we examine the degree to which segregation is related to exposure to employed, co-ethnic neighbors. Specifically, we calculate the share of neighbors who are employed co-ethnics for each racial or ethnic group. As expected, as segregation increases the share of employed co-ethnic residents to which the average African American or Latino resident is exposed increases consistently. It is possible that this greater exposure to employed co-ethnics in more segregated areas mitigates the harms of segregation operating through other channels, but given overall negative associations, these mitigating benefits do not appear to be large. The results should be interpreted with caution, however, as the measure of enclaves is a very rough approximation.

3.) <u>Public services</u>

Public schools are a critical, and typically neighborhood-based, public service. As a proxy for the quality of neighborhood public services, we explore differences in the relative test

scores of elementary schools to which children from different backgrounds have access in

metropolitan areas with different levels of segregation. Table 3 reveals that the gaps between

whites and African Americans in the exposure to neighborhood school proficiency are large,

starting at an index score of 4.7 in low segregation areas. The gap increases by more than a

factor of five to 25.6 in high segregation areas. The white-Latino gaps in school proficiency also

increase consistently and by roughly a factor of five, from 3.9 in low segregation areas to 19.9 in

high segregation areas. The results suggest that school quality may also be an important

mechanism through which segregation operates.

4.) <u>Institutional density</u>

To approximate the level of neighborhood institutional density we compute census tract

counts of several types of for-profit and not-for profit establishments. Drawing on Small and

McDermott (2006), Table 3 shows the gap in the average black and Latino metropolitan area

resident's exposure to the listed private business establishments relative to the average white

resident's exposure. We also add the density of not-for-profit establishments such as business or

civic associations and political or religious organizations.

When examining individual private business categories, we find some consistent patterns.

Most notably, as levels of metropolitan area segregation increase, the black-white and Latino-

white gaps in exposure to banks widen dramatically, implying that both blacks and Latinos are

exposed to fewer bank branches. With black-white segregation, pharmacies exhibit a similar

pattern and with Latino-white segregation, childcare centers show the same pattern of greater

gaps in exposure in more segregated areas. Grocery stores, on the other hand, display a pattern

in the opposite direction than banks—as levels of metropolitan area segregation increase, African

Americans and Latinos are exposed to more grocery stores. These counts do not control for the

size or quality of the grocery stores, however, and it is possible that in more segregated metropolitan areas, blacks and Latinos have access to a greater number of small, lower quality stores. Therefore, although levels of segregation are not consistently related to a greater or reduced overall presence of business establishments, the composition of the establishments varies with segregation and for some categories segregation appears to have different effects for African Americans and Latinos (e.g. pharmacies and childcare centers).

In terms of non-profits, African Americans are exposed to a greater density of non-profit organizations than either whites or Latinos. The white-black gap in exposure to not-for-profit institutions generally declines with segregation while no clear pattern is observed for the white-Latino gap. Thus, in less segregated metropolitan areas African Americans presumably have relatively greater access to a wide array of civic, political, fraternal, and religious organizations, than African Americans in more segregated metropolitan areas.

Given the mixed patterns in the relationship between metropolitan area levels of segregation and available measures of the density of common institutions, it seems that institutional density broadly conceived may not account for much of segregation's impact on individual outcomes. Institutional presence certainly may still matter, but further exploration is needed to study the characteristics of the different institutions present in different neighborhoods.

5.) <u>Violence</u>

The relationship between segregation and exposure to violent crime presents a particularly striking pattern. For both blacks and Latinos, the gap with whites in exposure to violent crime increases relatively consistently with levels of segregation. Most of that gap, however, is driven by the dramatic reduction in white exposure to neighborhood violent crime as both white-black and white-Latino segregation increases. It appears that segregation may enable

whites to cluster in neighborhoods that are insulated from violence, perhaps through public or private security investments. Black and Latino exposure to neighborhood violent crime, by contrast, remains relatively similar even as segregation increases. The white-black gap in neighborhood exposure to violent crime is large and increases substantially from an 18.5 point gap to a 33.9 point gap as the level of segregation increases (see Table 3). Both the white-black gap and the difference between the gaps in low and high segregation metropolitan areas are larger for African-Americans than for Latinos, suggesting that, to the extent that segregation affects individual outcomes through its correlation with exposure to violence, segregation is likely to have a greater impact on African Americans than Latinos. The results should be considered with some caution, however, as they are based on a smaller sample of cities for which neighborhood level crime data wwere available and on crime data from 1999-2001, several years prior to the IPUMS sample used here, together providing less confidence in their generalizability.

VII. Discussion and Conclusion

This research finds that segregation continues to be associated with significant reductions in educational attainment and labor market success for African Americans and that the associations between segregation and outcomes for Latinos are at least as large as those for African Americans. For native-born African-American and Latino young adults between the ages of 20 and 30, increases in levels of metropolitan area segregation are associated with significant reductions in the likelihood of high-school and college graduation, with lower earnings and employment rates, and with an increase in single motherhood.

These findings are somewhat unanticipated given the long history of intense black-white segregation and the systematic disinvestment in black neighborhoods through much of the last

century, when compared to the historically more moderate levels of Latino-white segregation (Marable 1983; Massey and Denton 1993; Telles and Ortiz 2008). These findings raise the question of which mechanisms may be at play to generate these differences.

One crucial mechanism seems to be differences in the levels of neighborhood human capital to which whites, Latinos, and African Americans are exposed, as they are consistent with both the negative associations for blacks and Latinos as well as the differences in the magnitude of the association between them. The white-Latino gap in neighborhood exposure to human capital increases dramatically as levels of segregation increase.

The significance of neighborhood levels of human capital is consistent with existing research on the effects of segregation for African Americans and for immigrants (Borjas 1995; Cutler, Glaeser, and Vigdor 2008; Edin, Freiksson, and Åslund 2003). The crucial question for further research that emerges is the mechanism driving this association. Do more highly-educated neighbors improve the outcomes of young neighborhood residents by setting high-achieving norms of educational and occupational attainment (Wilson 1991)? Does the educational attainment of neighbors act directly by actually connecting residents to networks and resources that facilitate greater levels of schooling and more remunerative employment? Or does neighborhood human capital act more indirectly, by contributing to a context of greater collective efficacy in which there is both neighborhood "social cohesion and the ability to realize shared expectations for neighborhood control" (Sampson 2012: 152)?

This research also finds support for other mechanisms connecting segregation to individual outcomes, particularly disparities in access to the quality of public services, as measured by local school proficiency, and exposure to violence. The dramatic increase in gaps between the average level of school proficiency to which whites as compared to blacks and

Latinos are exposed as segregation levels increase is also consistent with the significant association with individual outcomes. Although the available measures on which we rely here are not ideal, the widening disparities in black and Latino exposure to violence as compared to whites is also consistent with the associations between segregation and outcomes that we identify, and certainly merit further research.

Our findings, however, suggest that several commonly-discussed mechanisms may be less powerful than previously thought in explaining segregation's effects. For instance, with the exception of banks, the densities of the establishments we studied do not vary consistently with levels of metropolitan area segregation. This finding complements Small's (2008) work pointing out that, contrary to prevailing notions, organizational density varies widely among low-income, predominantly black neighborhoods. Admittedly, we do not have detailed information on the size and quality of the establishments and further research is needed. Similarly, the limited data we have suggests that ethnic enclaves do not seem to play a significant role in limiting harms of segregation for native-born young adults in most predominantly Latino neighborhoods. Several other studies have also questioned the benefits of enclaves, especially for employees and for groups with lower levels of human capital (e.g. Sanders and Nee 1992; Logan, Alba, and Stults 2003; Borjas 2000). Any inferences about enclaves should take into account, however, both that we were able to use only a very rough approximation of a residence based ethnic enclave and that young native born workers are not the prototypical beneficiaries of an ethnic enclave.

We hope this paper spawns further research on how segregation is shaping, and constraining, the social and economic mobility of African Americans and Latinos. This research suggests that segregation may have as negative effects for Latinos as it does for African

Americans and that persistent Latino-white segregation is of serious concern as the nation's metropolitan areas continue to become more diverse.

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[1] See online appendix Table A1 for further data about characteristics of predominantly white, black, and Latino neighborhoods.

[2] The dissimilarity index measures the evenness with which two different groups are distributed across neighborhoods within a metropolitan area. The index computes the proportion of one group that would need to exchange neighborhoods in order to achieve a uniform distribution of the groups across the city and thus provides a sense of how spatially concentrated one population group is in relation to the other.

[3] The isolation index captures the proportion of the neighborhood population that belongs to a given group. It can be conceptualized as a measure of the extent to which the average member of a group is likely to be exposed to members of that same group within his or her neighborhood.

[4] See online appendix Table A1.

[5] See online appendix Table A1

[6] We use the metropolitan area level segregation indices provided by US2010, a joint project between the Russell Sage Foundation and Brown University. See http://www.s4.brown.edu/us2010/About/History.htm and Logan and Stults (2011).

[7] Further data about the distribution of the segregation indices is available in online appendix Table A3.

[8] Although the matching is based on the nearest distance from each public elementary school to the centroid of each census block group and not on actual schooling attendance zones, Ellen and Horn (2011) show that the nearest school is also the zoned school in the overwhelming majority of cases.

[9] We also experimented with excluding individuals who had moved across Public Use Microdata Areas (PUMAs) in the previous year and obtained similar results.

[10] Results using the isolation index as a measure of metropolitan area segregation are available in online appendix Table A4 and results of the lagged effects of segregation are available in online appendix Table A5.

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Appendix Tables:

Table A1: Attributes of predominantly white, Latino, and black neighborhoods in 2010

	Neighborhoods		
	> 50% white	> 50% Latino	> 50% black
	(1)	(2)	(3)
White	80.4%	15.6%	12.9%
Black	5.8%	7.2%	76.7%
Latino	7.8%	71.7%	7.0%
Foreign born	8.2%	34.3%	9.3%
Less than high school	10.3%	36.7%	21.5%
College	32.5%	12.8%	15.8%
Female-headed households with children	10.1%	20.9%	29.7%
Unemployed	8.3%	12.8%	18.2%
Poor	8.4%	23.3%	26.4%
Median annual family income ($)	64,782	41,530	35,508
Median annual family income ($), whites	66,627	48,903	45,553
Median annual family income ($), Latinos	63,300	40,350	41,761
Median annual family income ($), blacks	57,315	40,918	34,447
Vacant housing units	10.6%	10.1%	17.8%
Number of census tracts	45,904	6,297	5,928
Population density (residents per sq. mile)	3,522	13,483	8,900
Share of white residents in these neighborhoods	88.7		
Share of Latino residents in these neighborhoods		43.8	
Share of black residents in these neighborhoods			42.4

Notes: The table reports all neighborhoods or census tracts in 363 metropolitan areas (CBSAs) in 2010 using data from the Neighborhood Change Data Base. We identify Latinos as individuals who self-identify as Latino regardless of their response to the question on race. Blacks are non-Latino blacks who self-identify as black and any other race. Whites are non-Latino whites who do not report any other race. The shares of residents with less than high school and with college are based on the population 25 years of age and older.

Table A2: Mean outcomes for whites, Latinos and blacks

	Whites		Latinos		Blacks	
	20–24	25–30	20–24	25–30	20–24	25–30
	(1)	(2)	(3)	(4)	(5)	(6)
High school	94.0%	95.0%	85.1%	85.9%	85.3%	88.1%
College	20.4%	44.3%	7.5%	20.6%	7.7%	21.2%
Idle	6.6%	9.0%	11.2%	12.6%	13.9%	13.1%
Annual income ($)	16,283	36,776	15,006	28,892	12,940	25,286
Single mother	7.0%	10.7%	14.6%	23.4%	24.4%	40.9%

Notes: Samples are restricted to native-born blacks, Latinos and whites living in metropolitan areas with more than 100,000 residents. Sample of Latinos (blacks) is further restricted to only those Latinos (blacks) living in metropolitan areas with at least 5,000 Latinos (blacks). Individuals who lived in a different state in the previous year are excluded. Idleness is defined as not working and not enrolled in school. The sample for earnings is people who are working, not enrolled in school, and have non-negative earnings. Annual earnings corresponds to the previous calendar year. Single motherhood includes only women who are unmarried.

Table A3: Sample moments of segregation indices

	Mean	St. dev.	p10	p25	p75	p90
Latino-white dissimilarity index	0.468	0.108	0.322	0.398	0.560	0.620
Black-white dissimilarity index	0.579	0.122	0.413	0.485	0.652	0.752
Latino isolation index	0.324	0.195	0.074	0.143	0.469	0.627
Black isolation index	0.377	0.192	0.110	0.215	0.533	0.629

Notes: Sample moments are calculated using samples of native-born blacks, Latinos and whites between 20 and 30 years old living in metropolitan areas with more than 100,000 residents and 5,000 Latinos or blacks for each segregation index accordingly. Individuals who lived in a different state in the previous year are excluded.

Table A4: OLS results on the relation between segregation and individual outcomes (isolation index)

	Age 20-24	Age 25-30
High school graduation		
Latino isolation index	0.014	0.007
	(0.033)	(0.031)
Latino isolation index × Latino	-0.262	-0.282
	(0.077)***	(0.076)***
Black isolation index	0.043	0.026
	(0.023)*	(0.018)
Black isolation index × black	-0.18	-0.122
	(0.033)***	(0.036)***
College graduation		
Latino isolation index	0.011	0.091
	(0.077)	(0.127)
Latino isolation index × Latino	-0.238	-0.612
	(0.067)***	(0.118)***
Black isolation index	0.111	0.210
	(0.050)**	(0.085)**
Black isolation index × black	-0.226	-0.425
	(0.045)***	(0.098)***
Idleness		
Latino isolation index	-0.071	-0.075
	(0.021)***	(0.021)***
Latino isolation index × Latino	0.229	0.196
	(0.037)***	(0.040)***
Black isolation index	-0.021	-0.008
	(0.017)	(0.018)
Black isolation index × black	0.175	0.122
	(0.057)***	(0.051)**
Log earnings		
Latino isolation index	0.186	0.252
	(0.138)	(0.102)**
Latino isolation index × Latino	0.126	-0.775
	(0.167)	(0.157)***
Black isolation index	-0.218	-0.004
	(0.094)**	(0.086)
Black isolation index × black	-0.121	-0.583
	(0.134)	(0.119)***
Single motherhood		
Latino isolation index	-0.054	-0.059
	(0.031)*	(0.037)
Latino isolation index × Latino	0.323	0.426
	(0.062)***	(0.093)***
Black isolation index	0.012	0.002
	(0.025)	(0.029)
Black isolation index × black	0.140	0.227
	(0.045)***	(0.054)***

Notes: All specifications include a constant term, census region and age indicators and an indicator variable for females. Specifications for blacks include a black indicator variable and those for Latinos include seven ancestry-group indicator variables (Mexicans, Puerto Ricans, Cubans, Central Americans, Dominicans, South Americans and other Latinos). Coefficients are reported with robust standard errors in parenthesis, which are clustered by metropolitan area. ***, **, and * indicate significance at the 1, 5, and 10 percent levels. Additional controls included for metropolitan areas are log population, log median household income and shares of population that are black, Latino, Asian, over 65 years, under 15 years, unemployed, working in manufacturing, in poverty status and with college degree. These metropolitan area controls are also interacted with a black or Latino indicator variable in each specification accordingly. Samples of metropolitan areas have at least 5,000 residents of a given minority group in order to be included in the specifications for that group. Individuals who lived in a different state in the previous year are excluded.

Table A5: OLS results on the relation between (lagged) segregation and individual outcomes

	Age 20-24	Age 25-30
High school graduation, 2010		
Latino-white dissimilarity index 2000	-0.005	-0.004
	(0.021)	(0.020)
Latino-white dissimilarity index 2000 × Latino	-0.223	-0.264
	(0.037)***	(0.041)***
Black-white dissimilarity index 2000	-0.012	-0.015
	(0.018)	(0.014)
Black-white dissimilarity index 2000 × black	-0.169	-0.087
	(0.039)***	(0.034)***
College graduation, 2010		
Latino-white dissimilarity index 2000	-0.011	0.031
	(0.035)	(0.065)
Latino-white dissimilarity index 2000 × Latino	-0.154	-0.383
	(0.033)***	(0.067)***
Black-white dissimilarity index 2000	0.041	0.102
	(0.032)	(0.058)*
Black-white dissimilarity index 2000 × black	-0.223	-0.343
	(0.036)***	(0.083)***
Idleness, 2010		
Latino-white dissimilarity index 2000	-0.040	-0.060
	(0.014)***	(0.016)***
Latino-white dissimilarity index 2000	0.168	0.156
	(0.027)***	(0.028)***
Black-white dissimilarity index 2000	-0.001	-0.010
	(0.014)	(0.015)
Black-white dissimilarity index 2000 × black	0.138	0.129
	(0.049)***	(0.042)***
Log earnings, 2010		
Latino-white dissimilarity index 2000	0.179	0.130
	(0.073)**	(0.061)**
Latino-white dissimilarity index 2000 × Latino	-0.119	-0.710
	(0.103)	(0.099)***
Black-white dissimilarity index 2000	-0.121	-0.031
	(0.080)	(0.062)
Black-white dissimilarity index 2000 × black	-0.201	-0.576
	(0.117)*	(0.115)***
Single motherhood, 2010		
Latino-white dissimilarity index 2000	-0.009	-0.032
	(0.021)	(0.025)
Latino-white dissimilarity index 2000 × Latino	0.260	0.411
	(0.048)***	(0.066)***
Black-white dissimilarity index 2000	0.040	0.007
	(0.018)**	(0.022)
Black-white dissimilarity index 2000 × black	0.115	0.250
	(0.055)**	(0.054)***

Notes: All specifications include a constant term, census region and age indicators and an indicator variable for females. Specifications for blacks include a black indicator variable and those for Latinos include seven ancestry-group indicator variables (Mexicans, Puerto Ricans, Cubans, Central Americans, Dominicans, South Americans and other Latinos). Coefficients are reported with robust standard errors in parenthesis, which are clustered by metropolitan area. ***, **, and * indicate significance at the 1, 5, and 10 percent levels. Additional controls included for metropolitan areas are log population, log median household income and shares of population that are black, Latino, Asian, over 65 years, under 15 years, unemployed, working in manufacturing, in poverty status and with college degree. These metropolitan area controls are also interacted with a black or Latino indicator variable in each specification accordingly. Samples of metropolitan areas have at least 5,000 residents of a given minority group in order to be included in the specifications for that group. Individuals who lived in a different state in the previous year are excluded.

Table A6: OLS results on the relation between segregation and individual outcomes (only Mexicans)

	Age 20-24	Age 25-30
High school graduation		
Latino-white dissimilarity index	-0.024	-0.021
	(0.024)	(0.022)
Latino-white dissimilarity index × Mexican	-0.150	-0.144
	(0.042)***	(0.043)***
Black-white dissimilarity index	-0.005	-0.003
	(0.020)	(0.016)
Black-white dissimilarity index × black	-0.176	-0.114
	(0.044)***	(0.038)***
College graduation		
Latino-white dissimilarity index	-0.001	0.090
	(0.041)	(0.076)
Latino-white dissimilarity index × Mexican	-0.085	-0.303
	(0.045)*	(0.079)***
Black-white dissimilarity index	0.069	0.149
	(0.036)*	(0.065)**
Black-white dissimilarity index × black	-0.249	-0.397
	(0.040)***	(0.095)***
Idleness		
Latino-white dissimilarity index	-0.037	-0.067
	(0.018)**	(0.017)***
Latino-white dissimilarity index × Mexican	0.103	0.078
	(0.033)***	(0.036)**
Black-white dissimilarity index	0.001	-0.014
	(0.016)	(0.017)
Black-white dissimilarity index × black	0.160	0.133
	(0.056)***	(0.048)***
Log earnings		
Latino-white dissimilarity index	0.115	0.137
	(0.091)	(0.067)**
Latino-white dissimilarity index × Mexican	0.079	-0.406
	(0.131)	(0.128)***
Black-white dissimilarity index	-0.164	-0.017
	(0.084)*	(0.065)
Black-white dissimilarity index × black	-0.223	-0.690
	(0.133)*	(0.126)***
Single motherhood		
Latino-white dissimilarity index	0.026	-0.001
	(0.022)	(0.029)
Latino-white dissimilarity index × Mexican	0.067	0.166
	(0.046)	(0.081)**
Black-white dissimilarity index	0.040	0.010
	(0.019)**	(0.023)
Black-white dissimilarity index × black	0.127	0.286
	(0.059)**	(0.057)***

Notes: All specifications include a constant term, census region and age indicators and an indicator variable for females. Sample of Latinos includes only Mexicans. Specifications for blacks include a black indicator variable and those for Mexicans a Mexican indicator variable. Coefficients are reported with robust standard errors in parenthesis, which are clustered by metropolitan area. ***, **, and * indicate significance at the 1, 5, and 10 percent levels. Additional controls included for metropolitan areas are log population, log median household income and shares of population that are black, Latino, Asian, over 65 years, under 15 years, unemployed, working in manufacturing, in poverty status and with college degree. These metropolitan area controls are also interacted with a black or Latino indicator variable in each specification accordingly. Samples of msas have at least 5,000 residents of a given minority group in order to be included in the specifications for that group. Individuals who lived in a different state in the previous year are excluded.