

Racial Intermarriage in the Americas

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Introduction

Sociologists and demographers have long been interested in racial intermarriage to examine race relations. That scholarship draws attention to the rigidity of the black-white boundary, especially when compared to marriages involving whites with Asians or Hispanics (Kalmijn 1993; Qian and Lichter 2007; Fu 2010; Fryer 2007).

¹ These findings, though, are based on analysis for a single country: the United States. However, Brazil and Cuba also have prominent black populations - indeed, the number of Africans brought to Brazil was more than ten times and to Cuba more than double, the number brought to the United States (Eltis 2017, Eltis et al 1999). All three countries have large white populations from extensive immigration from Europe and histories of anti-black discrimination across many social dimensions, including marriage (Sawyer 2005; Fernandez 2010; Telles 2004; Osuji 2013) but there are no systematic inter-country comparisons. Descriptive comparisons of intermarriage rates show greater racial intermarriage for Brazil compared to the United States (Telles 2004) and evidence for Cuba also suggests higher rates than those in the United States (Catasus 1989, Rodriguez Ruiz 2004, Fernandez 2010). Greater black-white marriage in Brazil and Cuba than the United States is consistent with the race mixture (*mestizaje*) ideologies

prevalent in much of Latin America (Skidmore 1976, de la Fuente 2001, Telles and Garcia 2013), where interracial marriage is the site of contemporary race mixture.

Theoretically, racial intermarriage is affected by preferences and opportunities (Kalmijn 1998). Since national ideologies about race mixture might structure preferences, Brazilians and Cubans of different races may be more open to intermarriage than Americans. However, differences between Cuba and Brazil are more likely to occur because of status differences since national ideologies and racial attitudes are similar according to the literature. Structurally, Brazil has had very high racial educational and income inequality –among the highest in the world- (Telles 2004) while Cuba has had very low levels since the 1960s (De la Fuente 2001; Sawyer 2005), presumably creating greater opportunities in Cuba for blacks and white to meet each other. Based on these large racial status differences, intermarriage might thus be expected to be greater in Cuba than Brazil.

Based on evidence for the United States, Kalmijn (1998) theorizes that educated minority members have more individualistic and universalistic attitudes and are less attached to family and community of origin and he sees greater opportunities for intermarriage among more educated minorities, who are less likely to find others like them and thus more likely to marry majority group members who are closer to them in status (marital homogamy). Whether these positive educational gradients are reproduced in Brazil is questionable given descriptive findings that intermarriage is more prevalent among the poorer and less educated, where residential segregation is substantially lower than the United States and blacks and whites have higher levels of exposure to each other (Telles 2004). Cuba may be similar to Brazil in terms of interracial exposure within educational strata but, unlike Brazil, blacks and whites tend to be highly

educated overall suggesting that educational gradients may be nonexistent or small. In both Brazil and Cuba, we know of no systematic evidence that examines educational gradients.

We examine black-white marriages and their educational gradients in Brazil, Cuba and the United States. We also explore intermarriage of mulatos (mixed race persons with African and European ancestry)² to whites and to blacks and their educational gradients in Brazil and Cuba. The recent availability of anonymized and harmonized individual census microdata for the 2000 and 2010 round of censuses of Brazil and the United States and the 2000 round for Cuba allows a comparative analysis of racial intermarriage in the three countries. We use log-linear techniques, which effectively control for internal geographic differences in the distribution of the population by race, educational level and type of union (marriage vs. cohabitation). We analyze patterns of intermarriage on the black to white continuum, including mulato persons in Brazil and Cuba, by selecting a sample of young couples and using the same methodology and applying similar controls in each country.³

Background

Theory: Why Study Intermarriage

Intermarriage has many useful properties for understanding race relations in a given society. According to Gordon's (1964) assimilation theory, intermarriage represents the undermining of the ultimate barrier to full social acceptance of excluded or formerly excluded outgroups (Qian and Lichter 2007). Its occurrence probably represents the most intimate of social interactions and the breakdown of rigid social boundaries at the individual and macro-societal level. At the individual or couple level, intermarriage suggests that intermarried partners

accept each other as social equals and represents high levels of social tolerance or low levels of social distance (Gordon 1964; Qian and Lichter 2007; Kalmijn 1998). Given that marriage involves a long-term commitment, particularly in formal unions, it signals particularly strong levels of racial tolerance.

At the societal level, intermarriage is measurable for a large segment of the population (i.e. the married population), allowing an examination of the degree or pervasiveness of racial tolerance or openness or, in Barthian terms, the degree of rigidity of racial boundaries (Barth 1969; Wimmer 2008). By calculating intermarriage rates, analysts may then examine changes over time or differences across nations, social strata or ethnoracial group. Measured over time, shifts in rates of intermarriage may represent changes in the rigidity of racial boundaries in a society. We interpret differences in intermarriage across nations or across educational segments to reflect the relative rigidity of racial boundaries across countries or social strata (Heaton and Mitchell 2012).

Kalmijn (1998) notes that intermarriage patterns arise from individual preferences for certain characteristics in potential partners; influences of third parties particularly one's social group or institutions such as family, church and state; and constraints in the marriage market such as the relative numbers of potential marriage partners of a particular social group. In terms of the influences of third parties, states can sanction particular types of intermarriages as 17 states in the United States did until 1967 (Qian and Lichter 2007; Fryer 2007) and families continue to exert pressures on partner choice in all three societies (Osuji 2013; Fernandez 2010; Hordge-Freeman 2015). By contrast, the Brazilian state has never sanctioned miscegenation or intermarriage. On the contrary, since the 1930s until about 2001, Brazilian elites have touted its racial democracy and race mixture as a virtue and a proud fact of Brazilian history.

The occurrence and pervasiveness of intermarriage may also influence social norms about its acceptability, especially for younger generations who use these norms to inform their own choices of marital partners. Furthermore, it may also lead to a growing mulato population in the next generation, which itself is presumably more likely to intermarry. Moreover, intermarriage brings relatives, friends and other persons in the social networks of intermarried partners, creating more interracial ties throughout these societal networks.

However, the extent to which intermarriage itself represents a reduction of inter-racial barriers in general is questionable, as the Brazilian case has shown. Telles (2004) shows that Brazilian intermarriage (and residential segregation), which shows substantial white-black social interaction compared to the United States, coexist with persistent racial discrimination and a steep racial hierarchy, where the top rungs of Brazil's steep income pyramid is nearly all white. He refers to the coexistence of these relatively fluid "horizontal race relations" with steep "vertical race relations" as the enigma of Brazilian race relations, as they challenge American theories like assimilation that claimed high levels of intermarriage are key determinants of the extent to which nonwhites would assimilate or be accepted by whites. Interracial marriage is more accepted, at least among popular classes, but racial inequality and particularly the near absence of blacks and mulato persons in the middle class and in universities was widely accepted as natural, at least until the past decade or so⁴. In Brazil and probably in much of Latin America, race was often interpreted as an epiphenomenon of class (Hasenbalg 1979; González-Casanova 1979; Fernandes 1965; De la Fuente 2001) where racial discrimination was denied as a major impediment to stratification and mobility or seen as transitory. However, several academic studies have shown the independent effect of race on socioeconomic status in Brazil (Silva 1985; Telles 2004) and increasingly in other countries of Latin America (Flórez et al 2001; Telles,

Flores and Urrea-Giraldo 2015). Quantitative evidence for interracial marriage for Latin America is mostly limited to Brazil, where several studies at the national level have shown rates and patterns of intermarriage at the national level (Silva 1985; Telles 1994, 2004; Heaton and Mitchell 2012; Gullickson and Torche 2014).

A tendency for homogamy leads to intermarriage of persons of the same racial category or group and of persons that are close in educational and socioeconomic status. Furthermore, previous research has found that racial intermarriage is often more likely to occur among more educated sectors (Kalmijn 1998; Qian and Lichter 2007), suggesting that educational gradients tend to be positive. Kalmijn (1998) theorizes that educational gradients tend to be positive in interracial marriage because more educated persons have more universalistic attitudes brought by higher education and higher status persons also have greater opportunities to meet out-group members. However, preferences and opportunities may not align themselves the same way in the Brazilian case where opportunities for interracial interaction are common at most levels, since residential segregation is relatively moderate and labor markets are less segregated than in the United States. Interracial interaction is likely to be least common at the most educated levels where the presence of nonwhites has been uncommon at universities⁵ and in upper middle class residences. In the Cuban case, racial educational inequality is relatively minor compared to Brazil and the United States so that opportunities for interaction would seem to be the greatest of all three countries. Whether universalism is greater among the most educated in Brazil and Cuba is unclear although public opinion surveys in Brazil suggest that racial tolerance is similar for all persons regardless of race and class (Bailey 2009; Telles and Bailey 2013).

Analysis of educational differences in intermarriage is crucial for understanding the extent to which race is independent of class, in the socioeconomic sectors that racial barriers are most rigid and the extent to which intermarriage can be explained by class/educational attainment. In the United States where there has been significant educational upgrading for the black population, trends by educational attainment show that black-white intermarriage increases with education, particularly for black men but that racial intermarriage is quite limited at all educational levels (Qian and Lichter 2007). We know much less about intermarriage patterns by education or socioeconomic status in Brazil (Gullickson and Torche 2014). Based on descriptive data that does not account for the marginal distributions, Brazil reveals an opposite trend in comparison to the United States. In Brazil, where educational inequality is particularly great, descriptive findings have shown that intermarriage is especially common in lower educational sectors (Telles 2004; Silva 1985), much of which can be explained by the relative absence of blacks in higher educational sectors but, as far as we know, we do not have data to know the extent to which other factors may also explain educational differences (Gullickson and Torche 2014). We know virtually nothing about intermarriage patterns in Cuba.

In Brazil, a common argument was that racial discrimination could be reduced to class discrimination; thus race was merely an epiphenomenon of class (Fernandes 1965). As in Cuba with Castro, such thinking in Brazil was probably the result of Marxist inspired theories (Hasenbalg 1985; De la Fuente 2001). Such ideas have virtually disappeared among serious analysts in Brazil although some discrimination against blacks is due to class discrimination and the fact that blacks in Brazilian society tend to occupy the lower sectors of society. For example, analysis of labor market outcomes has shown that class origins account for much racial inequality (Silva 1985; Telles, Flores and Urrea-Giraldo 2015). Due to class homogamy and the

chances that persons at distinct positions in the socioeconomic hierarchy are less likely to interact than those that are similarly situated, we might expect that racial inequality by education to account for at least some racial endogamy and resistance to racial intermarriage. We examine that in our log-linear analysis. Similarly, we may expect that intermarriage is also limited because whites, brown and blacks are not similarly located across geographical space, which we also control to some extent in our analysis.

The Position of Mulato Persons

Perhaps due to the influence of the one-drop rule, a mixed-race category on the black to white continuum has not been used in the U.S. Census since 1920 and it has rarely been used in popular discourse although a biracial movement since the 1990s has promoted the use of a mixed-race category in the Census (Nobles 2000). Nevertheless, African Americans of light skin color, which might serve as a proxy for mulatos in the United States, tend to have a social status that is between whites and dark-skinned African Americans and light-skinned African American women are more valued in the dating and marriage market (Hughes and Hertel 1990; Hunter 2005; Hamilton, Goldsmith, and Darity 2009). Keels and Harris (2014) find that light skinned African Americans are more likely to date interracially than medium and dark skinned counterparts and as far as we know there has been no analysis of racial intermarriage regarding the African Americans by skin tone or the mixed-race population in the United States. The lack of studies on interracial marriage for mixed-race persons is probably because mixed-race categories or skin color are not included in the Census or other large scale data sets, which are generally needed to analyze the rare cases of intermarriage along the black-white continuum.

The historic use of a mulato category in Brazil and Cuba and large numbers of persons that are classified into them reveals an important distinction with the United States,⁶ suggesting a tripartite racial system in the Latin American countries along the black to white continuum compared to a bipolar system in the United States (Bailey 2009; Telles 2004). Mulato persons in Brazil and Cuba may serve as a buffer between blacks and whites in intermarriage because their status, whether real or perceived, is intermediary. Blacks are at the bottom of the social structure and whites are at the top while mulato persons are more similar to both whites and blacks and blacks and whites are further from each other. Moreover, there may be an affinity effect in which mulato persons feel close to whiteness and blackness because of shared background with both and presumably greater social interaction with both in their families and communities.

Swidler (1986) has theorized that national narratives or myths create cultural repertoires or “common sense” on which individuals draw and that, in turn, pattern social actions. Mestizaje narratives thus become scripts or norms that promote intermarriage. Telles (2004) has shown that in Brazil, fluidity or tolerance on horizontal indicators such as intermarriage are clearly greater than in the United States suggesting that *mestizaje* narratives may become scripts or norms that promote intermarriage and tolerance on the horizontal level.

Whites, mulato persons and blacks generally represent ordered status categories but the exact position of the intermediate mulato category may vary and be disputed. Degler’s (1971) *mulatto* escape hatch theory, based on ethnographic studies of Brazil by Marvin Harris and others, holds that Brazil is different from the United States because mixed-race persons may become classified as or accepted as white or near white, especially with upward mobility, therefore escaping the stigma and discrimination associated with blackness. However, empirical studies have found that mulato persons in Brazil are much closer to blacks in socioeconomic

position while the upper middle class is almost entirely white (Hasenbalg 1985; Telles 2004). This finding has been used in black movement efforts to mobilize blacks and mulato persons around a single *negro* category (Hanchard 1994; Telles 2004) and major government institutions and the media often now use a single *negro* category. Analytically, these findings have bolstered a common practice to *a priori* aggregate blacks and mulato persons into a single negro category, which has had the effect of inhibiting explorations of mulato distinctions and their interactions with whites and blacks.⁷

Why Brazil and Cuba?

Brazil and Cuba stand out as the largest destinations of enslaved Africans in Latin America (Eltis 2014) and those two countries currently have the proportionally largest black population. According to the 2010 Brazilian Census and the 2002 Cuban Census, the population considered as Afro-descendant (*preto* and *pardo* in Brazil ; *negro* and *mulato* in Cuba) comprised 51 percent of the Brazilian population and 35 percent of the Cuban population (Telles and the Project on Ethnicity and Race in Latin America 2014). Most of the remaining population in both countries is considered white, products of Iberian colonization and subsequent immigration from Europe. In Brazil, and possibly Cuba, many whites might also have African or indigenous ancestors – possible in a society where race is determined mostly by appearance rather than ancestry (Telles 2004). Moreover, unlike most Latin American countries with mestizaje narratives, Brazil and Cuba’s narratives have celebrated African contributions as central to the nation (Skidmore 1976; De la Fuente 2001). Most others have touted the mixture of white and indigenous elements while marginalizing or ignoring those from Africa (Hooker 2005; Telles and Garcia 2013).

Although no compelling data exist for the colonial period, Brazil and Cuba are likely to have had much biological mixture during colonization as men greatly outnumbered women among Spanish and Portuguese immigrants and thus men often sought out nonwhite females as sexual mates (often forcibly), concubines and partners. Later immigration tended to be white and sex ratios more balanced but large mulato populations had been established. This compares to the more balanced sex ratio among whites in the U.S. colonies, where families predominated among European immigrants. Also, a mulato category has been used in Brazil (*pardo*) and Cuba (*mulato*) in most Censuses since the nineteenth century (Loveman 2014) while the United States used such a category(s) only during the 1880-1920 period (Nobles 2000). Finally, there have been no anti-miscegenation laws in Brazil or Cuba which legally forbade intermarriage, in contrast to the United States (Wade 1997; De la Fuente 2001).

In the nineteenth century, the large nonwhite population and widespread mixture in these and other Latin American countries became a source of consternation for Latin American elites preoccupied with becoming modern (Skidmore 1976; Stepan 1991; De la Fuente 2001; Telles and the Project on Ethnicity and Race in Latin America 2014). However, from the 1920s to 1940s, when racial science was becoming discredited, elites throughout Latin America created national narratives of *mestizaje* (race mixture), turning earlier national ideologies of whitening, white supremacy and mulato degeneracy on their heads (Von Vacano 2012; Skidmore 1976; Wade 1997).

Nonetheless, one would expect that *mestizaje* ideologies, which have become cultural scripts (Swidler 1981) and continue to be widely held (Telles and Garcia 2013) would lead to greater intermarriage. Also, cultural *mestizaje* or syncretism, which can also be found in music, food and religion and in the “lived experiences” of Latin Americans (Wade 2005), perhaps

further reinforce a greater tolerance for mixture. Brazil's race mixture ideologies include the idea of racial democracy, which contends that there is little or no racial democracy in that country and the dominance of that ideology probably forestalled anti-racist policies in that country until only the past two decades, when it instituted race-based affirmative action (Telles 2004).

The persistence of mixed-race categories such as mulato and mestizo, has been used as proof of the importance of race mixture in Latin America. However, the existence of a pardo or mulato category in Brazil and Cuba is both cause and consequence of an ideology of race mixture and not an automatic result of actual race mixture. Certainly, mulato categories existed in the U.S. Census from 1870 to 1920 but their disappearance was related to the growing prevalence of legal segregation, anti-miscegenation laws and the institution of the one-drop rule, where black-white mixtures were relegated to the black category (Davis, 1991; Nobles 2000).

The Cuban government expected that the eradication of structural inequalities and several decades of generational replacement, bolstered by a socialist anti-racist education (Fernandez 2010), would end or greatly diminish the previous and deep-seated racist attitudes of Cuban society. Class distinctions would eliminate racism (Sawyer 2006) but researchers (De La Fuente 2001; Sawyer 2006; Fernandez 2010) and Cuban intellectuals dispute that, arguing that while economic equality has been attained, leaders have been inattentive to Cuba's deep racism prior to the Revolution and have thus ignored the persistent anti-black attitudes (De la Fuente 2001; Sawyer 2006; Fernandez 2010). Also, analysts have noted that the "special period" since the end of Soviet subsidies in 1992 heightened racial inequality, giving whites far greater access to the hard currency introduced by immigrant remittances and the growing tourist industry (De la Fuente 2001; Sawyer 2006; Fernandez 2010). Cuban spokespersons today have continued to

promote claims that they have also overcome racism and racial discrimination (Cave 2016, Aznarez 2016).

The Cuban case is one where *mestizaje* discourses are prevalent but where status inequality is low, providing a natural experiment of how status homogamy affects interracial marriage. Unfortunately, there has been almost no analysis of racial intermarriage (or race relations generally) in contemporary Cuba except for some descriptive data from the 1981 Census (Catasús 1989) and at least one unrepresentative local survey (Rodriguez Ruiz 2004 cited from Fernandez 2010), although a pioneering ethnography was recently produced for interracial marriage in Cuba (Fernandez 2010). Fernandez (2010) examines “why contemporary interracial couples are the targets of racist commentary and social disapproval if the nation has such a long tradition of *mestizaje* and decades of socialist equality.” There has been no systematic quantitative analysis of racial intermarriage largely because national Censuses of Cuba have not been available in a format for such analysis.

In sum, the comparisons of the three nations represent quite distinct racial stratification systems with distinct structures underpinning intermarriage. For example, educational differences by race are particularly great in Brazil and almost nonexistent in Cuba, with the United States in between and there are strong race mixture ideologies in Brazil and Cuba but not in the United States. Also, racial politics varies widely among the three countries. Most notably, the United States ended segregation and instituted civil rights laws and affirmative action policies since the 1960s, Cuba has had a socialist government that proclaimed victory against racial inequality since the 1960s and Brazil was considered a racial democracy from the 1930s until fairly recently, perhaps when it instituted affirmative action in higher education since about 2001. However, racial prejudices and discrimination endure in all three societies.

Data

Census microdata samples harmonized by the Integrated Public Use of Microdata Series - International (IPUMS-I) project (Minnesota Population Center 2011) provided the data for this research. Data were selected from the following samples of individuals organized into households: Brazil 2000 (6%), and 2010 (5%), United States 2000 (5%) and 2010 (1%), and Cuba 2002 (10%). The Cuban microdata for the 2012 census has not been yet released. IPUMS constructs a family interrelationship variable, SPLOC, which indicates whether or not the person's spouse/partner lived at the time of the census in the same household and, if so, gives the person number of the spouse (Sobek and Kennedy 2009). SPLOC allows researchers to attach characteristics (i.e., race and educational attainment) of the spouses to each partnered person. For convenience we will refer to *spouses* and *intermarriage* although our analysis includes both marriages and cohabiting unions.

All co-residing couples in which women were 25-34 years old at the time of the census were selected for the analysis. Alternative age specifications for selecting couples yielded similar results. Intermarriage research based on prevailing couples (couples that have survived until the Census date) often deals with young couples only to minimize biases from union dissolution, remarriage, and educational upgrades after union formation. However, recent research has shown that, for the United States, prevailing marriages are overwhelmingly attributable to new marriage patterns and that the effects of the above mentioned factors on cross-sectional patterns of assortative mating are rather modest (Schwartz and Mare 2012). Therefore, we can reasonably assume that the large differences in intermarriage patterns in Brazil, Cuba and the United States are not due to cross-national differences in union dissolution, remarriage, and educational

upgrades after union formation. Another reason for limiting the analysis to young couples is to select those formed in the same period. The 25-34 age group provides a set of couples of fairly recent formation and high prevalence of women in unions. The percentage of women in union at the age of 34 was 80% in Brazil 2000 and 71.8% in 2010; 74% in Cuba 2002; and 78% in the United States 2000 and 64.8% in 2010.

The main variable of interest is race of the spouse. In Brazil and the United States, race was self-reported by the respondent or household member given a set of pre-defined categories. By contrast, in Cuba interviewers reported the skin color of the respondent. In all three countries, the respondent indicated the skin color of the other household members. The Brazilian questionnaires of 2000 and 2010 included the following categories: 'white' (*branco*), 'black' (*negro*), 'yellow' (*amarelo*), 'mixed' (*pardo*), and 'indigenous' (*indigena*). In Cuba, the options were: 'white' (*blanco*), 'black' (*negro*) and 'mixed' (*mestizo* or *mulato*). In Cuba, the Census question referred to "color" while in Brazil it referred to "color or race." The question on race in the US censuses included multiple options plus an 'open' category in case none of the pre-defined categories satisfied the respondent. The first two options in the US questionnaires were 'white' and 'black' (also listed as '*African American*' or '*negro*'). Of those who reported white or black we excluded Hispanics. Hence, technically speaking, our 'white' category corresponds to 'Non-Hispanic whites' and 'black' to 'Non-Hispanic blacks'. Persons of mixed-race were not identified as a single category in the US censuses of 2000 and 2010. People self-identified as mixed-race were given the choice to check all the racial categories that might have applied to their case. The fact, however, is that there were only 36,664 cases (0.26%) in the 5% census sample of the United States 2000 who had checked the 'white' and 'black' boxes together. We decided against considering these cases as 'mixed' race because they were not comparable with the mixed-race

category of Brazil or Cuba. In brief, the final racial classification includes the following categories: ‘white’, ‘mixed’, ‘black’ and ‘other’ in Brazil; ‘white’, ‘mixed’ and ‘black’ in Cuba; and ‘white’, ‘black’ and ‘other’ in the United States.

In addition to race, we classified couples according to educational attainment, type of union and region of residence, which are used as control variables. We have coded educational attainment into four categories: ‘Low’, ‘Medium-Low’, ‘Medium-High’, and ‘High’. These categories are delimited by different educational thresholds depending on the country: ‘0 to 3’, ‘4 to 7’, ‘8 to 11’ and ‘12 or more’ years of schooling in Brazil; ‘Primary’, ‘Lower Secondary’, ‘Secondary Completed’ and ‘College Completed’ in Cuba; ‘No High School Diploma’, ‘High School Diploma’, ‘Some College’ and ‘College Completed’ in the United States. Alternative classifications of educational attainment yielded very similar results. Had we used the same thresholds throughout, some categories would have had extremely few cases. For instance, 60% of women aged 25-34 had at least some college education in the United States 2010 but only 8.3% had this in Brazil 2000. Hence, for the United States, it made sense to distinguish between “some college” and “college” whereas in Brazil these two categories were combined.

We distinguish between ‘married’ and ‘cohabiting’ couples because the extent of cohabitation differs significantly between Brazil and Cuba on the one hand and the United States on the other (Esteve and Lesthaeghe, 2016) and there is evidence that shows that intermarriage is more common among cohabiting unions than in married ones (Esteve et. al. 2012). Indeed, some authors argue that the rise in cohabitation in the United States has contributed to increased intermarriage (Kalmijn 1998; Qian and Lichter 2007). Cohabiting unions were identified differently in the three countries. The two Brazilian censuses had a direct question on union status which, combined with the classical question on marital (legal) status, made it possible to

differentiate between married and cohabiting couples. In Cuba, the question on marital status included an item for cohabiting unions (*unidos*). In the United States, unmarried co-residing partners were identified as cohabitators.

Finally, we consider region of residence to account for the racial composition across regions. Ignoring this may lead to overestimation of the distance between racial groups (Harris and Ono 2005). We break down the analysis into 27 States in Brazil and 51 in the United States, and 15 provinces in Cuba. In Brazil 2000, for example, the percentage of black women aged 25-34 ranged from 2.5% in the State of Parana to 61.8% in Bahia. In the United States 2000, the highest percentages of black women were found in the District of Columbia (37.3%) and Mississippi (24.9%) and the lowest in Vermont and Montana (less than 1%). In Cuba, the percentage of black women ranged from 2.6% in the province of Granma to 13.4% in Santiago de Cuba.

Descriptive findings

Table 1 provides information on the distribution of women in union aged 25-34, by race, educational attainment, and country. Results for men are very similar to those of women. Thus, they are not reported. The last column of Table 1 shows the racial composition of women aged 25-34 in union in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010. White women in Brazil 2000 account for 55.9% of the population while mulato and black women account for 37.4% and 5.4%, respectively. In Cuba, white women represent 67.6%, mulato women 25.1%, and black women 7.4% of the population. In the United States 2000, 69.2% of women identified as white and 7.6% as black. In all three countries, white women represent more than 50% of the population and black women represent less than 10%. Mulato women account

for one-third of the population in Brazil 2000 and one-fourth in Cuba. In the United States 2000, the 'other' category represents for one-fourth of the population, mostly consisting of Hispanic and Asian populations. Between 2000 and 2010, the white population in Brazil and the United States decreased by 8.8 and 5.4 percentage points respectively. The decline in the white population in Brazil has been completely offset by the rise in mulatto and black populations. By contrast, in the United States, the percentage of black women has decreased as well. It is the "Other" category that has gained what white and black lost between 2000 and 2010.

There are substantial racial gaps in educational attainment in the three countries (Table 1). The percentage of white women in Brazil 2000 with higher education (12.3%) is 4.5 times higher than for black women (2.7%) and 4 times higher than for mulatto women (3.1%). The racial gap in educational attainment in Cuba is much lower than in Brazil and the United States. The share of Cuban women with higher education is similar for the three groups: 13.2% for whites, 11.1% for blacks, and 8.9% for the mulatto. In the United States, 43.2% of white women have completed college education compared with only 27.8% of black women. Trends between 2000 and 2010 reveal major expansion of education across racial groups in Brazil and in the United States. The percentage of women with 12 or more years of schooling in Brazil has risen from 12.3% to 27.2% among whites, from 3.1% to 12.1% among mulattos, and from 2.7% to 12% among blacks. In the same period, the percentage of women with college education completed in the US has increased from 43.2% to 54.2% among white women and from 28.2% to 38.0% among black women.

Table 2 displays the percentage of racially endogamous unions by women's race and educational attainment. In this table, we do not yet distinguish between married and unmarried unions. The percentage of racial endogamous unions is inversely correlated to the percentage of

exogamous unions. Thus, in this case, endogamy and exogamy can be used interchangeably. Racial endogamy refers to unions between persons of the same race. Endogamy represented 68.3% of all couples in Brazil 2000, 74.9% in Cuba, and 90.4% in the United States 2000. In all three countries, white women show the highest shares of endogamous unions: 73.3% of white women in Brazil 2000 were married to (or cohabiting with) white men compared to 84.7% in Cuba and 93.8% in the United States 2000. The percentage of black and mixed women in Brazil 2000 and Cuba married to men of the same race is lower than for whites: 45.5% of black women in Brazil 2000 were married to black men and 65.2% of mulato women were married to mulato men. In Cuba, the percentage of black and mulato women married to a man of the same race is 52.9% and 54.8% respectively. By contrast to Cuba and Brazil, black women in the United States 2000 were overwhelmingly married to black men (93.8%), at a level similar to that observed for white women. The data for Brazil and the United States in 2010 reproduces, overall, the same pattern as that of the year 2000 but with some slight changes. The percentage of endogamous unions has slightly decreased among whites in both countries and among blacks in the US. Among mulatos, there is a slight increase in the percentage of women who married endogamously between 2000 and 2010 (from 65.2% to 67.9%).

Racial endogamy varies by level of educational attainment. Brazilian and Cuban women show steeper educational gradients than women in the United States. Racial endogamy increases with education for white women and decreases for mulato women in Brazil and Cuba. The educational gradient in racial endogamy for black women decreases in Brazil and increases in Cuba. In 2000, 47.6% of black Brazilian women with low education were in endogamous unions compared with 44.0% of higher educated black women. In Cuba, the percentage of endogamous unions among black women was 43.8% for the lower educated and 58.7% for the higher

educated. Compared with Brazil and Cuba, the educational differences in racial endogamy in the United States are much lower.

Table 3 shows the relative distribution of unions cross-classified by the race of spouses. White-white couples represent 41.0% of all couples in Brazil 2000, 57.2% in Cuba, and 64.9% in the United States 2000. Under random circumstances, the expected share of white-white unions would have been 29.9% in Brazil, 45.2% in Cuba, and 45% in the United States. The observed figures are 36% in Brazil, 26% in Cuba, and 45% in the United States higher than the expected ones. Intermarried couples account for 31.8% of couples in Brazil, 25.1% in Cuba and only 1.2% in the United States if we exclude the “Other” category. The most frequent type of intermarriage is between white and mulato, which basically reflects the size of these groups in the total population. Regarding gender differences, the percent of couples involving white women and black men in the United States 2000 is three times larger than the percentage of couples involving black women and white men (0.9% versus 0.3%). Because the absolute size of the group affects the distribution of couples, in the next section, we turn to log-linear models to measure the interaction between racial groups controlling for the constraints of the racial composition of the population in union and other factors.

Log-linear models

Table 4 shows endogamy levels between racial groups in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010. The level of endogamy is measured as odds ratio (OR): the odds of members of racial group A marrying within A instead of B are compared with the odds of members of racial group B to marry A instead of B. If the odds are the same in both groups, the ratio will be 1, which implies that members of A and B are equally likely to marry members of A or B. If the OR is > 1 , a

member of A is more likely to marry within A than a member of B is to marry a member of A. If the OR is < 1 , a member of A is less likely to marry within A than a member of B is to marry a member of A. The higher the OR, the greater the endogamy between A and B. Endogamy levels are inversely correlated to intermarriage ($1/OR$): more endogamy, less exogamy/intermarriage and vice-versa. We use OR of endogamy because they typically yield values above 1 and are easier to interpret and compare than the OR of exogamy, which usually show very low values under 1 and close to 0.

In Table 4 we show endogamy levels for three types of couple combinations in Brazil and Cuba (white/mixed, white/black, mixed/black) and one in the US (white/black). For every country and year, we implemented the same set of models. In the interests of comparability, we avoided complex interactions and topological models. The input data consisted of contingency tables in which couples where women were aged 25-34 were cross-classified according to various dimensions: race of the spouses (M1), race of the spouses and geography (M2); race of the spouses, geography and type of union (M3); race of the spouses, geography, type of union and educational attainment of the spouses (M4 and M5)⁸. We focus on the interaction between the races of the two spouses and in comparing these interactions across countries. We included additional dimensions in Models 2 to 5 as control variables.

Model 1 (M1) examines endogamy levels between the partner's racial groups in a basic contingency table in which unions were cross-tabulated by the race of the spouses (i = wife's race; j = husband's race). In this simple case, the odds ratio can be calculated from a two-by-two table in which, for instance, only whites (where i or $j = 1$) and blacks (where i or $j = 2$) are involved. Hence the odds ratio of white-black endogamy is:

$$[1] \quad {}^{wb}OR = (f_{11} / f_{12}) / (f_{21} / f_{22}) \ ;$$

where f_{11} is the frequency of couples formed by a white wife and a white husband; f_{12} couples formed by white wife and a black husband; f_{21} couples formed by a black wife and a white husband; f_{22} couples formed by a black wife and a black husband.

Alternatively, the same odds ratio can be estimated by a log-linear model with the following specification:

$$[2] \quad \log f_{ij} = \mu_0 + \mu_i + \mu_j + \mu_{ij};$$

where $\log f_{ij}$ is the natural logarithm of the expected frequency for row i and column j ; μ_0 the constant; μ_i parameter of row i ; μ_j parameter of column j and μ_{ij} is the interaction parameter between row i and column j . If there were only two groups in the population, the μ_{ij} would define the level of endogamy among these two groups in the log-odds ratio scale ($OR = \exp \mu_{ij}$).

Results from Model 1 (Table 4) show that white, mixed, and black persons tend to marry within their own group. The odds ratios are well above 1 in all countries and for all racial pairings. The highest levels of endogamy and, thus, lowest levels of intermarriage, are found between whites and blacks but the levels differ according to the country. White-black (wb) endogamy is greater in the US 2000 ($^{US}OR^{wb} = 2160.1$) than in Cuba 2000 ($^{Cu}OR^{wb} = 81.6$) or in Brazil 2000 ($^{Br}OR^{wb} = 31.6$). Whites in Brazil 2000 are 31 times more likely to marry whites than blacks to marry whites. The level of endogamy among whites and blacks in Brazil 2000 is extremely low if compared with the figure of the US 2000, where whites are over 2000 times

more likely to marry whites than blacks. In Brazil and Cuba, where mixed populations are included in the analysis, the level of endogamy among whites and blacks is higher than that observed between whites and mixed and between mixed and black populations. Nevertheless, the pattern of intermarriage of the mixed population in Brazil is different from that of Cuba. In Brazil 2000, endogamy among whites and mixed populations (wm) is lower ($^{Br}OR^{wm} = 7.5$) than in mixed and black populations (mb) ($^{Br}OR^{mb} = 21.5$). This means that mixed populations in Brazil are far more likely to marry whites than blacks. Whereas in Cuba, endogamy levels in whites and mixed populations, and mixed and black populations have similar values ($^{Cu}OR^{wm} = 11.2$; $^{Cu}OR^{mb} = 8.9$). Overall, the 2010 data reproduce the same racial stratification system and differences across countries as the 2000 data but show a substantial decline in racial endogamy among whites and blacks in Brazil (from 31.6 to 23.5) and in the US (from 2160.1 to 702.0). In the US, the distance between whites and blacks in the marriage market continues to be by far the greatest in the three countries and still 30 times greater than in Brazil.

The racial stratification pattern that emerges from Model 1 is repeated in Model 2 (M2) through 5 (M5). Even when controls are applied, the United States emerges as the most endogamic country. Model 2 breaks the collapsibility assumption and measures racial endogamy by controlling for the racial composition of each state (Brazil or the US) or province (Cuba). Thus, changes from Model 1 to 2 in the odds ratio of endogamy can be directly credited to the fact that the racial composition varies across states or provinces and, accordingly, the structural opportunities for intermarriage are not the same in each state. As a result, Model 2 yields slightly lower levels of racial endogamy than Model 1. For instance, white-black endogamy declined from 31.6 to 24.2 in Brazil 2000, from 81.6 to 67.6 in Cuba, and from 2160 to 1904 in the United States 2000. Significantly, the white/black endogamy parameter is the most affected by the

control of geography, compared with white/mixed and mixed/black pairings in Brazil and Cuba. After controlling for geography, the highest level of endogamy in Brazil 2010 is no longer among whites and blacks (16.8) but among mixed and blacks (18.6), which makes sense considering the concentration of pardos in Brazil's Northeast region.

Model 3 (M3) controls for type of union and adds an interaction between type of union and racial endogamy. The model produces two sets of endogamy parameters, one for cohabiting and the other for married unions. Married unions are more endogamous than unmarried ones, especially in the case of white-black endogamy. On average, the white-black endogamy level among married couples is 2.8 times greater than among cohabiting couples in Brazil 2000, 4.2 greater in Cuba, and 4.3 greater in the United States.

Model 4 (M4) controls for the educational attainment of the spouses and for the interaction between the educational attainments of the spouses⁹, that is for educational assortative mating. Although the model proves that education is a strong structuring dimension of the marriage market (results not shown), the levels of racial endogamy have not changed substantially between Models 2 and 4. These results suggest that education and race are, to a certain extent, independent dimensions of the marriage market.

Figure 1 represents graphically the odd ratios for endogamous unions by race and country yielded by Model 4. We use a logarithmic scale on the vertical axis to accommodate the large differences that exist between the US on the one hand and Brazil and Cuba on the other. The US presents the highest level of white-black endogamy. In the US in 2000, whites and blacks are over 2000 (702 times in 2010) more likely to marry within their group than blacks and whites are to intermarry. White and black endogamy levels in Brazil and Cuba are substantially lower than in the United States. We can easily quantify the differences between countries by comparing

odds ratios across them. White-black intermarriage was 105 times more likely to occur in Brazil 2000 than in the United States 2000 ($2046.5/19.5=105$) and almost 30 times more common in Cuba than in the US 2000 ($2046.5/72.7=28.2$). White-black intermarriage in Brazil 2000 is 3.7 more likely than in Cuba ($72.7/19.5=3.7$).

Intermarriage between white and mixed populations in Brazil is lower than intermarriage between mixed and black populations, which basically means that mixed populations are more likely to marry whites than blacks. Intermarriage between mulatos and whites is 4.3 times more likely to occur than between mulatos and blacks ($18.6/4.3=4.3$). By contrast, mixed populations in Cuba shows similar levels of endogamy/intermarriage for white-mixed and mixed-black couples ($OR^{wm} = 6.5$; $OR^{mb} = 6.9$). In other words, mixed populations in Cuba intermarry equally with blacks and whites. In Brazil, the distance in the marriage market between whites and blacks is similar to the distance between mixed and blacks in 2000 but less in 2010.

Model 5 in Table 4 includes an interaction between racial endogamy and educational attainment. This model enables us to explore the extent to which racial endogamy varies by educational groups. There are many options for showing the interaction between racial endogamy and education. We can compare across educational groups within the same race, or compare across races within the same educational group. For the sake of consistency with the previous models, we opted for the second approach: to compute the endogamy odds ratios by women's and men's education. The method is very simple and intuitive. Instead of computing the endogamy odds ratios between white and black populations combining all educational groups, we structure the analysis by educational group and sex. The endogamy odds ratio must be read as how often white women of low education are likely to marry whites compared with their counterparts among black women marrying whites. A value of 1 suggests that among

women of lower education, white women are equally likely to marry whites as black women are. Hence, there is no endogamy. Values above 1 indicate that there is a tendency towards endogamy.

The results are shown in Figures 2 and 3 and in Appendix 1. Figure 2 shows the level of white-black endogamy by sex and educational attainment in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010. Odds ratios are represented on a logarithmic scale. Results show that white-black endogamy rises with education in Brazil 2000 and Cuba 2002, and therefore intermarriage lessens with educational attainment among men and women. In other words, racial differences widen with educational groups with higher levels of education. One might think that at higher levels of education, the racial boundaries would be less salient, but this is not the case in Brazil 2000 and Cuba 2002. Strengthening of endogamy among the highest educated people may be the result of more selective behavior among highly educated whites. This indicates that distance between highly educated white women and highly educated black women is wider than the distance between white and black women of low education. Endogamous marriages among highly educated white or black Cuban women are 4.3 times more likely than among women with low levels of education ($187.2/43.9=4.3$). Fairly similar educational gradients are found among Cuban men. The educational gradient in Brazil 2000 is not as steep as in Cuba. Brazilian whites and blacks with a level of high education are 2.4 times ($46.4/19.4=2.4$) more likely among men and 2.9 times ($50.8/17.5=2.9$) among women to marry endogamously than whites and blacks in Brazil with lower levels of education.

By 2010, Brazil had completely changed the pattern. Overall, white-black endogamy decreased, as seen in the above model, and increased endogamy at high levels of education is no longer occurring, the reason being that the odds of highly educated white women and men

marrying a white person have decreased in this period, mainly because of increased expansion of higher education across all racial groups.

As in Brazil and Cuba, racial endogamy in the United States changes by level of education but the gradient is mainly negative. As education increases, white-black endogamy decreases, particularly among men. However, the educational gradients in racial endogamy in the US 2000 and 2010 are not as marked as in Cuba and Brazil. White and black men of low education in the US 2000 are only half as likely to intermarry than the highest educated group ($1790.8/3487=0.51$).

These results point to a significant distinction between Brazil 2000 and Cuba 2002, on the one hand, and the US, on the other. Intermarriage between whites and blacks is more likely to occur among men and women with the lowest education in Brazil and Cuba but most likely to occur among men with the highest levels of education in the US. US women show no clear pattern by education.

Figure 3 shows the white-mixed and the mixed-black racial endogamy levels by educational attainment and sex in Brazil and Cuba. This figure is organized into four panels representing two countries by two types of racial couples. Racial pairings involving mulato populations have lower rates of endogamy than blacks and whites in both countries. Men and women show fairly similar educational gradients in racial endogamy. As shown in the models, as well in Figure 1, mulato populations are less likely to intermarry with blacks than whites (see left top and bottom panels) and this pattern holds through all educational groups but is more pronounced among the higher educated men and women. The low levels of endogamy found between mixed and white populations in Brazil (top left panel), by comparison with any racial pairing examined in this study, are quite homogenous across educational groups. In Cuba, the

degree of endogamy increases with education for both white-brown and brown-black racial pairings (top and bottom right panels). However, the educational gradient is significantly lower than in the white-black case (see Figure 2).

Summary

The United States has been the focus of the vast majority of studies of black-white intermarriage. In this article, we have sought to decenter the study of interracial marriage away from the United States by directly comparing it with the cases of Brazil and Cuba, where histories of slavery involving Africans has been at least as prominent as the United States. In both Latin American countries, narratives of *mestizaje* or race mixture since slavery have dominated thinking about race relations suggesting greater intermarriage there but we expected Cuba to have more intermarriage than Brazil because of the former's relatively high educational levels among all races and because educational gaps were small. We were clearly expecting the two Latin American nations to have more racial intermarriage (or less racial endogamy) than the United States but once the relevant variables were adjusted, it was not clear how much.

Using the same analytical strategy to examine the three countries with newly released IPUMS-I census microdata from the 2000 and 2010 round of censuses, we find that black-white intermarriage in the 2000s is fully 105 times as likely to occur in Brazil and 28 times as likely to occur in Cuba compared to the United States. Our findings confirm that racial boundaries between whites and blacks are particularly rigid in the United States compared to Cuba and Brazil. However, we also found black-white intermarriage to be 3.7 times as great in Brazil compared to Cuba, contrary to our initial expectations.

We also examined intermarriage of the mulato population to both whites and blacks in Brazil and Cuba. Since the early twentieth century, there has been no comparable category for the United States and thus modern studies of racial intermarriage have not examined this category. We found that mulatos are more likely to marry blacks and whites than blacks and whites are likely to marry each other, in both countries. While there has been a tendency to lump blacks and mulatos in Brazil, our data reveal the merits of disaggregating them. First of all, mulato-white marriages are clearly more frequent than black-white marriages. In Brazil, mulato-white marriages are fully 4.5 times as likely to occur as white-black marriages and in Cuba, the comparable figure is 11.2 times. Secondly, in a finding that surprised us, mulatos are closer to whites in Brazil while they are midway between whites and blacks in Cuba. Specifically, Brazilian mulatos are 4.3 times as likely to marry whites as they are to marry blacks but in Cuba, mulatos are equally likely (1.05 times) to marry blacks compared to whites. From a cross-national perspective, our findings also reveal that brown-black intermarriages are actually more common in Cuba. Brown-black marriages are less than half as likely (0.4) to occur in Brazil compared to Cuba while white-brown marriages are 50 percent more likely (1.5) in Brazil; this compares to black-white marriages which are 4 times more frequent in Brazil compared to Cuba.

Racial intermarriage patterns persist at all educational levels, type of unions, and state/province of residence. Controls for the unequal distribution of racial groups across regions, for differences between married and cohabiting unions, and for the educational distribution of racial groups hardly affected rates of intermarriage in any country. Married couples are more racially endogamous than cohabiting couples and educational differences across racial groups hardly reduce the odds ratio of racial endogamy compared to models that not take into account the educational attainment of the spouses. Surprisingly, even in a country like Cuba, where

controls for educational attainment would have been less needed than in Brazil and the United States because there are hardly any racial gaps in educational attainment among young generations, there is a strong tendency to marry within racial groups. This shows the strength of racial preferences despite educational equality.

Finally, patterns along the educational gradient are striking. In the United States, we found no educational gradient in the white-black endogamy levels among women but a negative gradient for men. This is not surprising, as it supports previous literature (e.g. Qian and Lichter 2007). However, these gradients are slight compared to those we found for Brazil and Cuba. In both Latin American countries, the educational gradient is positive and relatively steep from all gender perspectives. Black-white endogamy levels increase by educational attainment. In other words, unlike the United States, intermarriage notably increases among persons with progressively lower education. Thus, ongoing mestizaje in these two Latin American nations, where it occurs, is primarily among persons of low socio-economic status. In sum, racial boundaries are relatively rigid in the US and least rigid in Brazil with Cuba intermediate but racial intermarriage is concentrated among the low status sectors of Brazil and Cuba whereas there is no clear status pattern for the United States. Mixed populations play a quite different role in Brazil and Cuba.

Discussion and Conclusion

Although black-white intermarriages in the United States have grown considerably in recent years, our findings show that its frequency continues to pale in comparison to Brazil and Cuba. What might account for the differences? All three countries have histories of European colonization and settlement, with extensive histories of African slavery and all are characterized

by persistent racial discrimination where whiteness is privileged and blackness is stigmatized. However, a major difference between the United States and the Latin American countries has been in race mixture over several centuries and the ideologies and practices that evolved from it. We can begin with colonization of the Americas, when English colonization was mostly family-based while Spanish and Portuguese colonists were mostly men who sought out indigenous, black and mulato women as mates, at least for the first three hundred years. These unequal pairings, whether forced or consensual, begot further mixtures and became self-perpetuating among the ever-growing mulato population. Later, in the nineteenth and twentieth centuries, nation-making elites in Brazil, Cuba and other Latin American nations would consolidate mulato categories and design national narratives that proclaimed miscegenation as central to the nation, often in contrast to the United States, where racial segregation further divided blacks and whites. These national narratives of mestizaje in Cuba and Brazil are likely to have become “social scripts” (Swidler 1986) that, despite racial discrimination, made nonwhites permissible or possible as marriage partners for whites, though less desirable than other whites. Race mixture, originally sustained by a high sex ratio and later perpetuated by national ideologies, would lead to cultural practices that accepted race mixture to some extent, at least more than in the United States.

In the United States, mixtures involving even small amounts of African blood would be considered black and the white category was supposedly pure but there was mixture in all categories in Brazil and other parts of Latin America because race was appearance-based. Moreover, anti-miscegenation laws in the US were strictly enforced in many U.S. states as late as 1967, while such laws were nonexistent in Brazil and Cuba. Since the end of these laws in the United States, intermarriage continues to be rare, presumably reflecting the persistence of an

especially strong cultural taboo in which whites reject whites as marriage partners. Residential segregation and similar racist laws until about that time effectively separated blacks and whites and since then, segregation has declined slowly and friendship networks have been slow to integrate, further limiting black-white contact. In sum, at the level of preferences, the rejection of blacks as marriage partners was probably not nearly as great in the Latin American countries as in the United States and in terms of opportunities, levels of interracial contact or exposure have also been greater in Brazil (Telles 2004) and presumably in Cuba than in the United States.

But what about Cuba-Brazil differences? We expected black-white intermarriage to be greater in Cuba, mostly because status differences between races are far smaller than in Brazil. However, we were surprised to find that black-white intermarriage rates are more than four times greater in Brazil compared to Cuba and these differences held up regardless of educational levels. Since it seems that the structures of contemporary Cuban society would favor more intermarriage in Cuba because of its strikingly low levels of inequality, Brazil-Cuba difference are likely to be found in preferences. and probably worked to maintain explicit anti-black prejudices longer than in Brazil. The economic, political, cultural and social dominance of the United States in pre-Castro Cuba probably shaped explicit anti-black prejudices longer than in Brazil or any other Latin American country (de la Fuente 2001, Loveman 2014). For example, American influences encouraged segregation; many public and private spaces often excluded blacks and were openly discriminatory, particularly where American tourists congregated (de la Fuente 2001: 158). Since that time, Cuba's socialist state dismantled racially exclusive spaces but through class-based language and it mostly ignored persistent racism even after it was clear that material equality would not eliminate it (De la Fuente 2001; Sawyer 2006; Fernandez 2010). Today, Brazil has directly addressed racial inequality through programs like affirmative action

(Telles 2004, Cicalo 2012) although the Brazil-Cuba differences we found for 2000 and 2002 preceded these (Telles 2004). Methodologically, studies of Cuba, Brazil or any other Latin American country, to the extent they make comparisons, tend to compare race with the United States and not other Latin American nations, revealing the pitfalls of lumping many countries into a single Latin American model and the persistent primacy of the United States in the field of race and ethnicity.

The *mulatto* escape hatch theory (Degler 1967), which was mostly buried because it poorly explained the Brazilian labor market (Silva 1985) is confirmed for marriage in Brazil and Cuba, where mulatos have higher status than blacks. However, that status is much higher in Brazil, where mulatos are four times as likely to marry whites compared to blacks while in Cuba, mulatos are about equally likely to marry whites or blacks so that mulatos appear to be an equal buffer between whites and blacks. By contrast, our findings suggest that the primary racial boundary in the Brazilian marriage market is between black and non-black, while the white-mulato boundary is relatively fluid. So much that, cross-nationally, mulato-black marriages are more than twice as likely to occur in Cuba, where mulato-white and especially black-white marriages are less frequent. This finding for Brazil is in strong contrast to the labor-market evidence that blacks and mulatos are similarly positioned (Silva 1987, Telles 2004), which underlies the identificational proscriptions that blacks and mulatos should be considered under a single category. Finally, to bring the third case back in, had we been able to disaggregate “blacks” in the United States into dark and light skin blacks (roughly equivalent to blacks and mulatos), we would most probably find that the primary racial boundary is between whites and a mulato/light skin black category, with fluidity within the black category (between light skin (mulato) and dark skin blacks). This is consistent with the one-drop rule and the absence of a

significant mulato or mixed race category in contemporary United States, although the U.S. Census now allows respondents to identify in multiple categories (Liebler and Halpern-Manners 2008).

Intermarriage is more common at the bottom of the educational hierarchy in Brazil and Cuba. Overall, the educational gradient is negative in both countries while it is nonexistent in the United States and even positive from the perspective of blacks. In Latin America, blacks and whites are more likely to come into contact at the bottom of the status hierarchy and the residential segregation common in the United States, is more moderate in Brazil and probably in Cuba. Thus the theory that more educated persons are more likely to be more universalistic and racially tolerant is only partially supported for the United States but not at all for Brazil and Cuba, where the exact opposite occurs. In Latin America, centuries-old race mixture has tended to occur at the bottom rungs of society while the elite is exceptional in Brazilian society for maintaining its whiteness and distance from blacks and mulatos. Since blacks and mulatos continue to predominate at the bottom of society although with many whites, the top is overwhelmingly white, opportunities for intermarriage have clearly been at the bottom. Relatively moderate segregation has also permitted interaction of whites, mulatos and blacks at levels that are uncommon in the United States.

While Brazilian marriages involving the intermediate category (white/mulato and black/mulato) remained fairly stable from 2000 to 2010, black-white marriages increased. This suggests a growing tolerance of blacks by whites and acceptance of black-white marriages on behalf of both groups. There were also greater opportunities for blacks and whites to meet, most notably in college where nonwhites enrolled for the first time in large numbers during the period because of affirmative action in many universities. But beyond changing preferences and

opportunities, the large increase in black-white marriages might also be the results of a third factor: changing classification during the period (Marteletto 2014; Telles and Paschel 2014). Racial classification is particularly fluid in Brazil and in the 2000-2010 period, there was a marked tendency toward darkening (Paixão 2000; Marteletto 2014), which could have altered intermarriage rates particularly in the black category. However, for the most part, intermarriage rates are stable across time. The exception is the changing education gradient for Brazil where endogamy was no longer highest among the most educated whites and blacks although this may also be due to the sudden influx of blacks in universities due to affirmative action between 2000 and 2010, which may have also created decreases in racial endogamy among the most educated. In comparison to low educated persons, Telles and Paschel (2014) find that higher educated persons were more likely to classify as black rather than pardo so that couples that may have been labeled white-brown in 2000 came to be classified as white-black in 2010, as black classification itself became more socially acceptable and valued among the higher educated (Cicalo 2012). Thus, it could be that a similar educational gradient would have held in 2010 as 2000 if patterns of self-identification had not changed.

There has been surprisingly little quantitative research on intermarriage outside of the United States. Our findings have shown how the addition of Brazil and Cuba, where slavery was more extensive than the United States, contests U.S. based theories about black-white intermarriage. Intermarriage is certainly not random in any of these countries but our analysis has shown that the black-white marriage in the United States is extremely limited in this regard. Also, educational gradients are negative in Brazil and Cuba, contrary to theories that they should be positive (Kalmijn 1998). Finally, the behaviors of mulatos has been ignored because such persons are considered black in the United States. We find that mulatos exhibit quite distinct

behaviors from blacks in Brazil and Cuba, suggesting that *mulatto* escape hatch theories may be resuscitated for the marriage market but in forms that combine the peculiar racial boundary making distinctions across countries.

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Table 1. Educational attainment by race. Women in union 25-34. Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010.

Country	Low	Medium-Low	Medium-High	High	Total	N	%
	0 - 3	4 - 7	8 - 11	12 +			
Brazil 2000							
White	13.3%	33.5%	40.9%	12.3%	100%	315,340	55.9%
Mulato	27.1%	38.1%	31.7%	3.1%	100%	210,944	37.4%
Black	29.7%	37.9%	29.6%	2.7%	100%	30,626	5.4%
Other	28.7%	27.7%	31.2%	12.4%	100%	7,376	1.3%
Total	19.6%	35.4%	36.7%	8.3%	100%	564,286	100%
Brazil 2010							
White	3.0%	19.4%	50.5%	27.2%	100%	195,434	47.1%
Mulato	6.1%	31.8%	50.0%	12.1%	100%	182,201	43.9%
Black	6.4%	28.9%	52.6%	12.0%	100%	30,041	7.2%
Other	11.1%	25.5%	44.8%	18.6%	100%	7,422	1.8%
Total	4.7%	25.6%	50.3%	19.3%	100%	415,098	100%
	Primary	Lower secondary	Secondary completed	College completed			
Cuba 2002							
White	12.2%	31.4%	43.3%	13.2%	100%	41,050	67.6%
Mulato	14.5%	35.4%	41.2%	8.9%	100%	15,220	25.1%
Black	9.0%	33.4%	46.5%	11.1%	100%	4,488	7.4%
Total	12.5%	32.5%	43.0%	12.0%	100%	60,758	100%
	No high school diploma	High school diploma	Some college	College completed			
United States 2000							
Non-hispanic white	7.1%	24.7%	24.9%	43.2%	100%	425,121	69.2%
Non-hispanic black	12.4%	28.4%	31.1%	28.2%	100%	46,624	7.6%
Other	31.6%	22.0%	18.5%	27.8%	100%	142,857	23.2%
Total	13.2%	24.4%	23.9%	38.5%	100%	614,602	100%
United States 2010							
Non-hispanic white	4.5%	18.2%	23.0%	54.2%	100%	64,420	63.8%
Non-hispanic black	8.0%	22.5%	31.5%	38.0%	100%	6,913	6.8%
Other	23.1%	22.4%	19.4%	35.1%	100%	29,668	29.4%
Total	10.2%	19.7%	22.5%	47.5%	100%	101,001	100.0%

Source: Own calculations based on census microdata, IPUMS

Table 2. Percentage of endogamous unions by race and educational attainment. Women in union 25-34. Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010.

	Low	Medium-Low	Medium-High	High	Total
Brazil 2000					
White	60.0%	70.0%	75.9%	88.1%	73.3%
Mulato	71.8%	65.7%	60.2%	50.7%	65.2%
Black	47.6%	45.4%	43.8%	44.0%	45.5%
Other	54.0%	32.3%	32.5%	46.3%	40.3%
Total	65.0%	66.5%	69.0%	81.2%	68.3%
Brazil 2010					
White	61.0%	63.0%	69.0%	81.0%	70.7%
Mulato	76.0%	71.0%	66.0%	62.0%	67.9%
Black	56.0%	50.0%	46.0%	41.0%	46.8%
Other	74.0%	44.0%	31.0%	34.0%	38.4%
Total	69.5%	65.9%	65.5%	72.8%	67.2%
Cuba 2002					
White	81.4%	82.7%	85.8%	89.2%	84.7%
Mulato	58.4%	54.2%	54.4%	53.4%	54.8%
Black	43.8%	49.0%	56.1%	58.7%	52.9%
Total	72.7%	72.4%	75.9%	80.5%	74.9%
United States 2000					
Non-hispanic white	91.6%	93.8%	92.9%	94.6%	93.8%
Non-hispanic black	95.2%	95.1%	93.5%	92.3%	93.8%
Other	94.2%	80.0%	68.9%	69.0%	79.4%
Total	93.3%	91.0%	88.6%	90.2%	90.4%
United States 2010					
Non-hispanic white	89.0%	90.0%	89.0%	92.0%	90.9%
Non-hispanic black	94.0%	92.0%	91.0%	89.0%	90.5%
Other	96.0%	84.0%	70.0%	72.0%	79.8%
Total	93.8%	88.2%	84.6%	87.5%	87.6%

Source: Own calculations based on census microdata, IPUMS

Table 3. Distribution of unions by race of the partners. Women in union 25-34. Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010.

Women's race	Men's race				Total
	White	Mixed	Black	Other	
Brazil 2000					
White	41.0	12.4	2.0	0.5	55.9
Mulato	10.7	24.4	2.1	0.3	37.4
Black	1.6	1.3	2.5	0.1	5.4
Other	0.4	0.3	0.1	0.5	1.3
Total	53.6	38.4	6.7	1.3	100%
Brazil 2010					
White	33.2	11.0	2.5	0.3	47.0
Mulato	10.8	29.9	3.0	0.3	44.0
Black	2.0	1.7	3.4	0.1	7.2
Other	0.4	0.5	0.2	0.7	1.7
Total	46.4	43.1	9.1	1.4	100%
Cuba 2002					
White	57.2	8.5	1.8	-	67.5
Mulato	8.2	13.8	3.1	-	25.1
Black	1.5	2.0	3.9	-	7.4
Other	-	-	-	-	-
Total	67.0	24.2	8.8	-	100%
United States 2000					
White	64.9	-	0.9	3.5	69.2
Mulato	-	-	-	-	-
Black	0.3	-	7.1	0.2	7.6
Other	4.2	-	0.5	18.5	23.2
Total	65.1	-	8.5	22.1	100%
United States 2010					
White	58.0	-	1.3	4.5	63.8
Mulato	-	-	-	-	-
Black	0.4	-	6.2	0.3	6.8
Other	5.2	-	0.8	23.4	29.4
Total	58.4	-	8.2	28.2	100%

Source: Own calculations based on census microdata, IPUMS

Table 4. Estimated odds ratios for racially endogamous pairings for married and cohabiting unions of women aged 25-34 in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010.

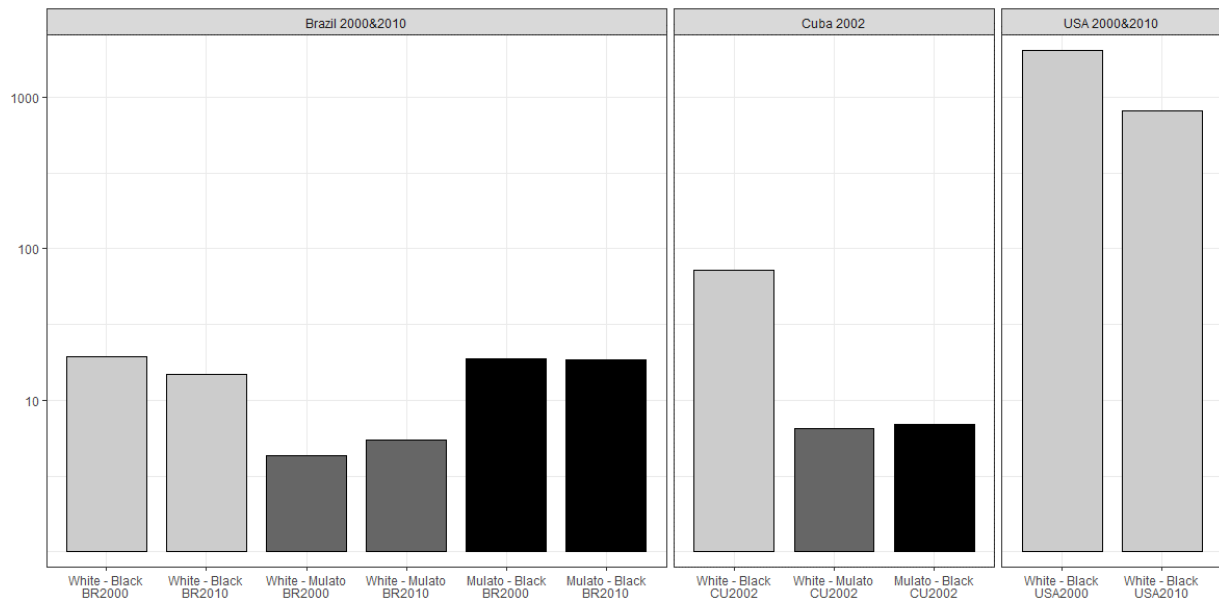
Model	White/Mulato		White/Black		Mulato/Black	
	2000	2010	2000	2010	2000	2010
Brazil 2000 and 2010						
M1. Racial endogamy	7.5	8.74	31.6	23.5	21.5	20.6
M2. M1. + Geography	5.0	6.07	24.2	16.8	18.9	18.6
M3. M2. + Racial endogamy by type of union						
Cohabitation	3.9	5.26	12.7	13.1	13.7	16.9
Marriage	5.6	6.58	35.8	20.0	25.5	20.8
M4. M3. + Educational assortative mating	4.3	5.44	19.5	14.9	18.6	18.6
M5. M4. + Racial endogamy by education			See Figures 2 & 3			
Cuba 2002						
M1. Racial endogamy	11.2		81.6		8.9	
M2. M1. + Geography	6.8		67.6		6.7	
M3. M2. + Racial endogamy by type of union						
Cohabitation	5.0		36.0		5.7	
Marriage	9.9		151.4		8.2	
M4. M3. + Educational assortative mating	6.5		72.7		6.9	
M5. M4. + Racial endogamy by education			See Figures 2 & 3			
United States 2000 and 2010						
M1. Racial endogamy			2160.1	702.0		
M2. M1. + Geography			1904.2	631.6		
M3. M2. + Racial endogamy by type of union						
Cohabitation			593.1	253.5		
Marriage			2555.7	919.2		
M4. M3. + Educational assortative mating			2046.5	813.1		
M5. M4. + Racial endogamy by education			See Figures 2 & 3			

* All coefficients are statistically significant at the 0.05 level.

* The complete specification of the models is available upon request.

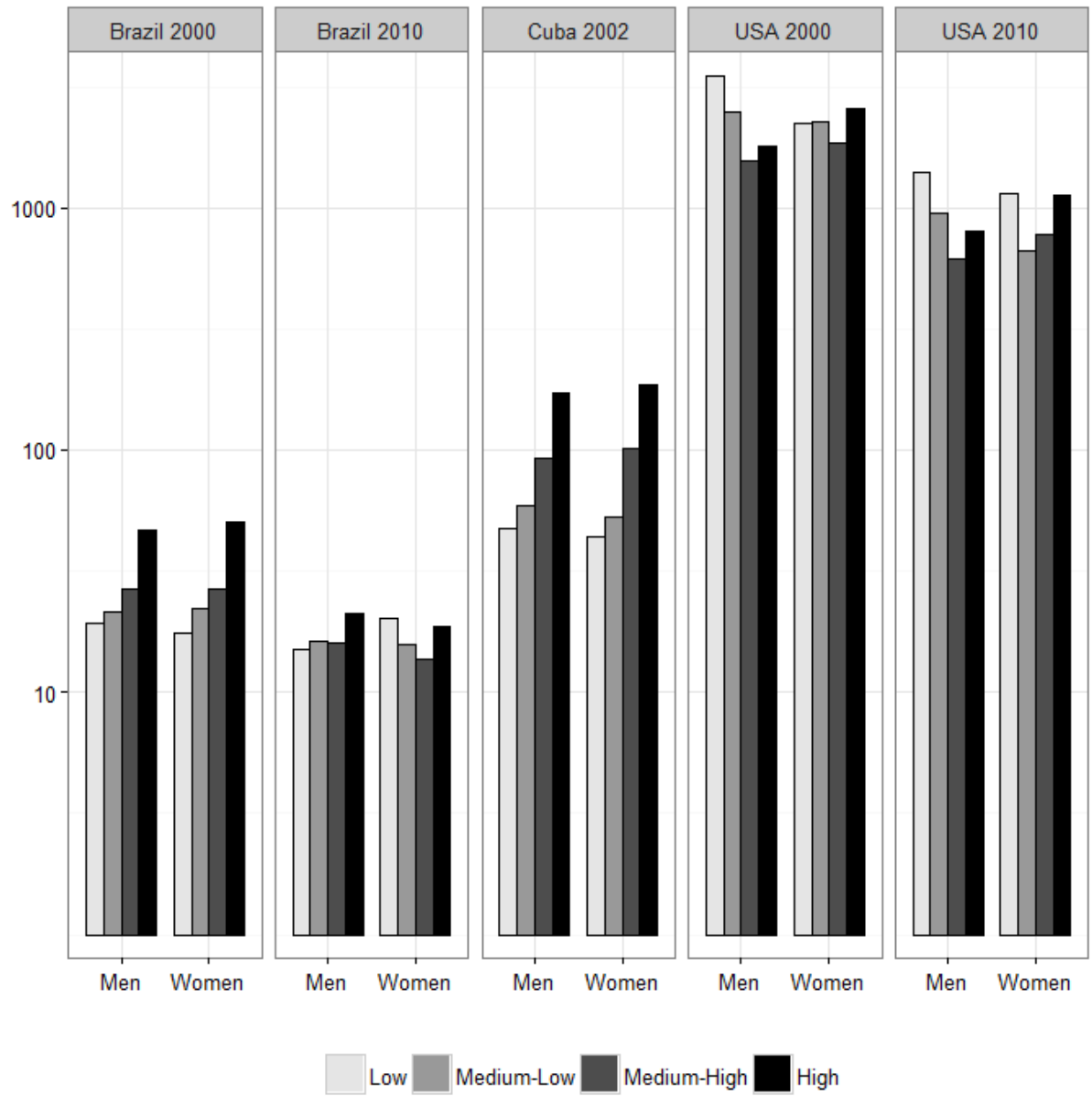
Source: Own calculations based on census microdata, IPUMS

Figure 1. Estimated odds ratios for racially endogamous pairings among married and cohabiting unions of women aged 25-34 in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010 (Model 4)



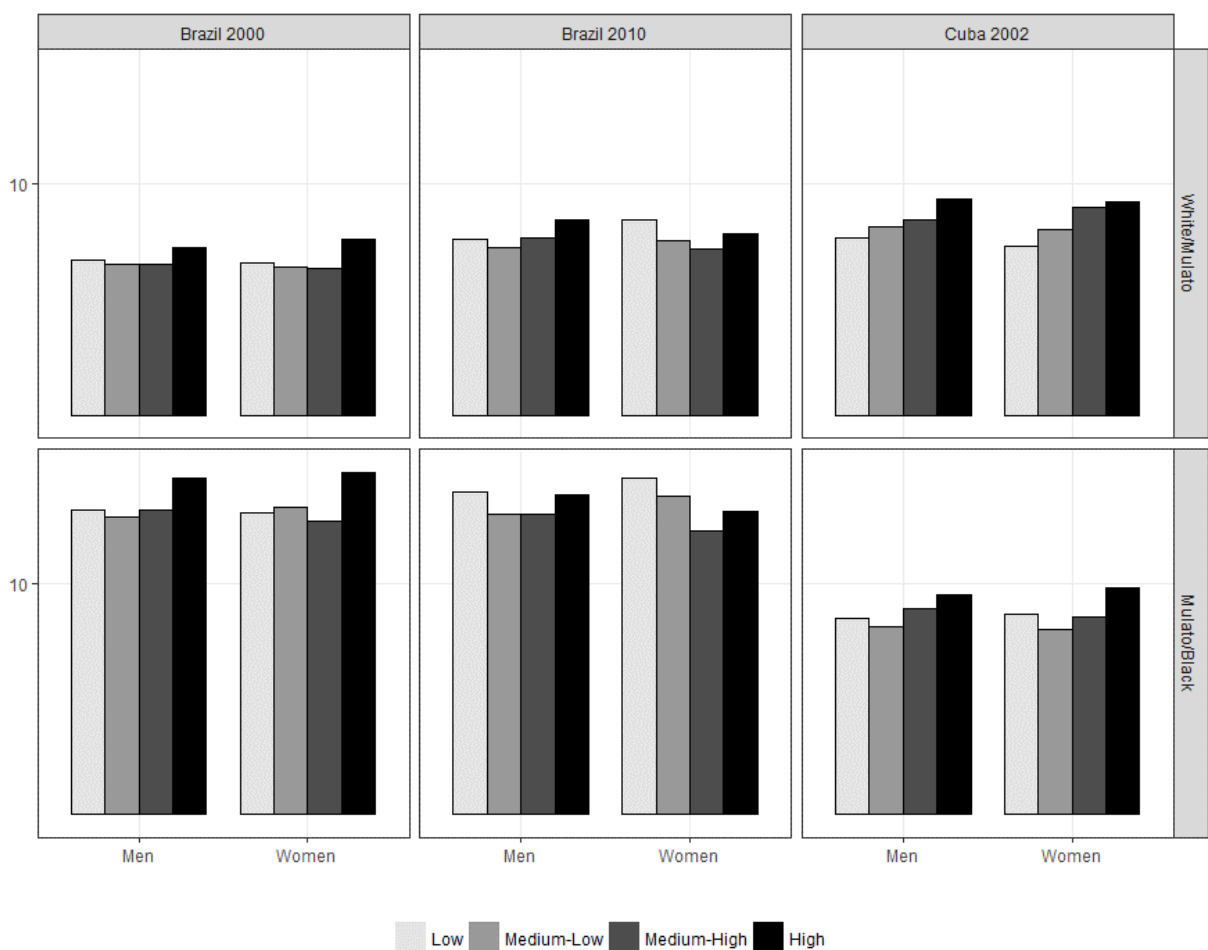
Source: Own calculations based on census microdata, IPUMS.

Figure 2. Estimated odds ratios for endogamy levels between whites and blacks by educational attainment among married and cohabiting unions of women aged 25-34 in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010 (Model 5)



Source: Own calculations based on census microdata, IPUMS.

Figure 3. Estimated odds ratios for endogamy levels between mulato-black and white-mulato racial pairings by educational attainment among married and cohabiting unions of women aged 25-34 in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010 (Model 5)



Source: Own calculations based on census microdata, IPUMS.

Appendix A. Estimated odds ratios for endogamy levels between white-mulato, white-black, and mulato-black racial pairings by educational attainment among married and cohabiting unions of women aged 25-34 in Brazil 2000 and 2010, Cuba 2002, and the United States 2000 and 2010 (Model 5)

	White/Mulato		White/Black		Mulato/Black	
	2000	2010	2000	2010	2000	2010
Brazil 2000 and 2010						
Women						
Low	4.6	7.0	17.5	20.2	20.3	28.7
Medium - Low	4.4	5.7	22.0	15.7	21.3	23.9
Medium - High	4.3	5.2	26.5	13.7	18.5	16.8
High	5.8	6.1	50.8	18.8	30.4	20.4
Men						
Low	4.7	5.8	19.4	15.1	20.8	24.8
Medium - Low	4.5	5.3	21.5	16.1	19.4	19.8
Medium - High	4.5	5.9	26.8	15.9	20.9	19.9
High	5.3	7.0	46.4	21.0	28.8	24.1
Cuba 2002						
Women						
Low	5.4	5.4	43.9	43.9	7.4	7.4
Medium - Low	6.4	6.4	52.7	52.7	6.3	6.3
Medium - High	8.0	8.0	102.0	102.0	7.2	7.2
High	8.4	8.4	187.2	187.2	9.5	9.5
Men						
Low	5.8	5.8	47.3	47.3	7.0	7.0
Medium - Low	6.5	6.5	58.6	58.6	6.5	6.5
Medium - High	7.0	7.0	93.0	93.0	7.8	7.8
High	8.7	8.7	171.1	171.1	8.9	8.9
United States 2000 and 2010						
Women						
Low			2238.8	1148.1		
Medium - Low			2267.9	666.6		
Medium - High			1860.3	773.1		
High			2578.6	1120.6		
Men						
Low			3487.0	1410.8		
Medium - Low			2491.4	946.0		
Medium - High			1564.8	619.1		
High			1790.8	802.6		

Source: Own calculations based on census microdata, IPUMS.

Endnotes

¹ Although the proportion of whites married to blacks steadily increased by several times from 1960 to 2000, only about 0.90 percent of married white men and 0.45 percent of married white women were married to blacks in 2000 (Fryer 2007). This figure is particularly striking considering that blacks constitute about 12 percent of the national population.

² The census terms are *mulato* in Cuba and *pardo* in Brazil. *Mulato* refers to the mixture of black and white persons and *pardo* translates as brown and is often used to describe Brazil's population of partly African ancestry (Stephens 1989). Given the large population of enslaved Africans in both countries, these mixed-race categories are assumed to consist predominately of persons with African ancestry.

³ Note that except for a table describing interracial marriage in the 1980 Census (Catasus 1989), there has been no quantitative evidence on intermarriage for Cuba.

⁴ That has probably changed in the past decade or so as affirmative action in higher education is now found in most public universities and public opinion now recognizes racial discrimination as a leading social problem (Cicalo 2012).

⁵ Our results for 2010, however, are unlikely to pick up this change since we examine only males age 25-35 in 2010 and since affirmative was widely available in Brazilian universities only until about 2007, when it would have affected persons well under that age.

⁶ Note that mulato persons in Brazil are defined by color as well as ancestry. Also, they are the progeny of many generations of racial mixture and not necessarily of the past generation.

⁷ Ethnographic studies have sometimes favored using a bipolar system of race while referring to mulato/black distinctions as phenotypical or color-based because the subjects themselves often have similar understandings of race, phenotype and color (Osuji 2013; Hordge-Freeman 2015).

The reference to race rather than color or phenotype suggests a more essentialistic understanding of such social divisions, although race is based on phenotype or color. Nevertheless, both the bipolar and tripartite systems are popularly used and understood among ordinary Brazilians probably because both systems are now institutionalized –the tripartite system in the Census and official statistics including affirmative action and the bipolar system in the media, government and social movements - and race mixture continues to be a dominant theme (Sheriff 2001; Telles 2004; Cicalo 2012). Importantly, the Brazilian Census since 1991 asks respondents to identify their “color or race” and the Cuban Census continues, as it continually has since the 19th century, to ask about “color” or “skin color” only (Loveman 2014).

⁸ Person weights are applied to get a representative sample of the total population of couples, but we did not expand the number of couples to the total population.

⁹ The interaction between type of union and race has not been included to avoid presenting a set of results for married couples and another for cohabiting unions. Differences by type of union remain constant even controlling for education (results available from the authors).