### DEMOGRAPHIC RESEARCH

## VOLUME 49, ARTICLE 28, PAGES 737–768 PUBLISHED 2 NOVEMBER 2023

https://www.demographic-research.org/Volumes/Vol49/28/DOI: 10.4054/DemRes.2023.49.28

Research Article

## Black-white intermarriage in global perspective

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## Black-white intermarriage in global perspective

# Edward Telles<sup>1</sup> Albert Esteve<sup>2</sup> Andrés F. Castro Torres<sup>3</sup>

#### **Abstract**

#### BACKGROUND

Intermarriage is a leading indicator of racialized relations. Scholarly literature has focused on the United States. We show that, in world perspective, black—white intermarriage is especially low in that country. Surprisingly, there are no studies that compare black—white intermarriage across a broad range of countries around the world.

#### **OBJECTIVE**

How does black—white intermarriage compare in Brazil, Cuba, France, South Africa, the United States, and the United Kingdom circa 2010?

#### **METHODS**

We use odds ratios of endogamy and log-linear analysis of large micro-level datasets for each country.

#### RESULTS

Interracial marriage varies widely across countries. Despite increases in recent decades, US black—white intermarriage levels are the second lowest among the six countries, although they are markedly higher among cohabitors. Intermarriage rates (opposite of endogamy) are high in the Latin American countries, moderate in the European countries, low-moderate in the United States and extremely low in South Africa. Controls for structural factors have minor effects, suggesting that national differences are mostly related to cultural factors.

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#### CONCLUSIONS

Our findings suggest that national differences are primarily from differences in racial attitudes and tolerance toward intermarriage, specifically the willingness of blacks and whites to cross racial boundaries in marriage. We also find that although the effects of historical laws prohibiting racial intermarriage have waned, they continue to account for especially strong taboos against intermarriage in the United States and especially South Africa.

#### CONTRIBUTION

This is the first systematic comparison of black—white marriage across a broad set of countries around the world. We find that countries differ widely in the extent of black—white intermarriage.

#### 1. Introduction

American sociologists have long considered intermarriage a prime indicator of racial/ethnic integration (Alba and Nee 2003; Gordon 1964; Warner and Srole 1945). Evidence for the United States shows that the white-black boundary has been a particularly rigid and enduring one in comparison to that between whites and other ethnoracial groups, in intermarriage and in stratification generally (Fryer 2007; Qian and Lichter 2007; Alba and Foner 2013; Massey 2007; Jones et al 2021). Especially low intermarriage rates between whites and blacks suggest that African Americans are at the bottom and whites are at the top of the US racial hierarchy. With their higher intermarriage rates, Asian American women and Latina/os are in the middle (Feliciano 2001; Qian and Lichter 2007; Alba and Nee 2003). Intermarriage rates of US-born descendants of European immigrant groups with long-settled whites have been especially high and reveal assimilation into the general white category (Alba and Golden 1986; Feliciano 2001). While low black-white intermarriage suggests pessimism, one may be optimistic in that US black—white unions quintupled from 1980 to 2010, going from 0.3% of young couples in 1980 to 1.5% in 2010 (Torche and Rich 2017).<sup>4</sup> At the same time, the data also reveal that black—white intermarriage continues to be the most consequential racial boundary in the United States.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> As we show in our analysis, we estimate endogamy odds ratios for US black—white intermarriage at 540 in 2010. Based on the 0.3% figure for black—white intermarriage in 1980 (Torche and Rich 2017) and racial composition at the time, we calculate that the odds ratio of endogamy was then about 24,000.

<sup>&</sup>lt;sup>5</sup> This is the reigning view in the mainstream literature on intermarriage. However, ethnographies have shown that intermarriage also may occur through racial essentializing by partners or potential partners. See Osuji (2019) for the case of black—white couples in Brazil and see others on Asian—white intermarriage in the United States (Chong 2020).

While comparisons to other groups in the United States are plentiful, we have surprisingly little evidence of US black-white intermarriage in comparison to other societies. Theoretically, one might expect similarly low black—white intermarriage rates in other countries. Scholars have claimed that black-white relations are generally, as in the United States, at opposite ends in a global racial hierarchy (Fanon 1970; Winant 2001; Christian 2019; Bonilla Silva 2004), where white people and ideas of whiteness have the greatest social worth and black people and blackness the least. Notably, scholars have begun to discuss global anti-blackness (Bledsoe and Wright 2019; Beaman 2020; Kyobungi et al 2023). For many years in the 19th and early 20th centuries, science itself purported a similar racial hierarchy (Gould 1996). Although these scientific ideas are largely discredited, such ideas are commonly held to date (Morning 2011, 2014). On the other hand, evidence for Latin America shows a large empirical difference with the United States on intermarriage (Telles and Esteve 2019). Differences with other world regions or countries are less clear, especially in the absence of controls for population size, and as far as we know, there is no systematic empirical research about global variation for intermarriage across a wide range of countries.

Are black—white relations in other countries similarly strained? How paradigmatic or exceptional is the United States? Does the increase in US black—white intermarriage give us grounds for optimism when we understand black—white intermarriage in a global perspective? Although we are increasingly able to test black—white relations on several dimensions, we believe that intermarriage is an especially good indicator to systematically test cross-national differences. For this we compare black—white intermarriages in several major countries with data and methods that permit direct comparisons.

## 2. Background

Literature on black—white intermarriage is usually available for individual countries, but cross-national research on such intermarriage, or interracial marriage generally, is rare except for comparisons of two or three countries (Model and Fisher 2002; Hou and Myles 2013; Telles and Esteve 2019; Gullickson and Torche 2014). However, there is a growing literature on intermarriage of (almost always non-black) immigrant groups and their descendants with the native (usually white) population. That literature spans the study of many countries, mostly from Europe (Kalmijn 1998; Alba and Foner 2013; Song 2009; Collet and Santelli 2016; Lucassen and Laarman 2009), Canada (Kalbach 2002), and the United States (Kalmijn 1998; Alba and Foner 2013; Qian, Lichter, and Tumin 2018). As important as this literature is for understanding the integration of ethnoracial groups, it rarely engages with black—white intermarriage across multiple countries except among

black immigrants (Model and Fisher 2002; Alba and Foner 2013),<sup>6</sup> and rarely do these studies adjust for relative population sizes.

In this study we compare black—white intermarriage in Brazil, Cuba, France, the United Kingdom, the United States, and South Africa. These six countries represent distinct world regions with distinct racial compositions, levels of racial inequality, and histories of colonialism, slavery, segregation/apartheid, and postcolonial immigration. All are characterized by persistent racial inequality and discrimination (De la Fuente and Bailey 2021; Marx 1997; Small and Solomos 2006; Beaman 2017). Moreover, they represent five world regions: North America, the Caribbean, South America, Africa, and Europe.

We use the term *intermarriage* in a generic manner; in our study we examine both married and cohabiting couples. This distinction is important due to the unequal significance of these types of unions in the countries under analysis. Consensual unions, also known as free unions, are deeply rooted in Latin America and have historically served as an alternative to formal marriage in many regions and social subgroups (Esteve and Lesthaeghe 2016). In countries such as the United States, the United Kingdom, and France, consensual unions have notably increased in recent years, both as a precursor to marriage and as an alternative to it (Smock 2000; Perelli-Harris et al. 2014; Toulemon 1996). Consensual unions have also grown in South Africa, particularly among African women (Posel and Rudwick 2013). Given the growing importance of these types of unions, we examine intermarriage differences among countries considering all types of unions together and separately. Generally, existing literature suggests that cohabiting unions tend to be less racially endogamous than marriages (Blackwell and Lichter 2004; Telles and Esteve 2019). In short, due to the unequal prevalence of cohabitation in the studied countries and its tendency toward lower racial endogamy, we consider it relevant to introduce this dimension as a control variable.

White dominance is the result of European colonization beginning in the 15<sup>th</sup> century. Whites continue to be the politically and economically dominant group in all these countries, but numerically they range from large majority to demographic minority. The Dutch, followed by the British, came to South Africa as settler colonialists of the indigenous Africans (Marx 1997). The black population of South Africa comprises the large majority, and the black population is multiethnic. In contrast, the black populations of France and the United Kingdom are the smallest proportionately and are overwhelmingly formed by or descended from postcolonial immigration since World War II (Beaman 2017; Small and Solomos 2006), usually from their ex-colonies. In the three countries of the Americas, Portuguese, Spanish, and British whites were settler

<sup>&</sup>lt;sup>6</sup> Notably, Alba and Foner (2013) find that among immigrants and their recent descendants, black immigrants in the United States – a small proportion of African Americans – and Islamic immigrants in Europe have particularly low intermarriage rates.

colonialists, and the large majority of the black populations are descendants of enslaved Africans (Marx 1997; de la Fuente 2001). Depending on how you count the black population, Afro-Brazilians comprise about 10% or about 50% of the Brazilian population (Telles and Esteve 2019). Afro-Cubans are about 30% of the Cuban population. Blacks in the United States are less than 15% of the population.

With our cross-national comparison, we test the rigidity of the black—white boundary beyond the United States. International comparisons of racial intermarriage potentially reveal the degree of racial tolerance among countries but more specifically, the amount of racial mixing and preference for romantic partners on the basis of race. On the other hand, structural factors that are not directly racist may also play a role in intermarriage rates by race. We thus isolate actual preferences by race by controlling for whether the couple cohabits or is formally married and controlling for educational differences, which proxy class and affect exposure and preferences.

## 3. Theory

Intermarriage, or exogamy, has many useful properties for understanding the extent of rigidity or permeability of social boundaries in a given society (Burgess and Park 1993; Rodríguez-García 2015). Intermarriage represents the undermining of the ultimate barrier to full social acceptance of formerly excluded outgroups (Gordon 1964; Qian and Lichter 2007). Its occurrence signifies the most intimate of social interactions and the breakdown of rigid social boundaries. At the individual or couple level, intermarriage suggests that intermarried partners accept each other as social equals, and it represents high levels of social tolerance or low levels of social distance (Gordon 1964). Given that marriage involves a long-term commitment, particularly in formal unions, intermarriage thus signals particularly strong levels of racial tolerance. At the societal level, intermarriage rates permit an examination of the degree or pervasiveness of racial tolerance or the degree of rigidity of racial boundaries (Barth 1998; Wimmer 2013). High levels of antiblack animus have been documented in all six countries (Sawyer 2005; Marx 1997; Small and Solomos 2006; Beaman 2017), suggesting low levels of black—white intermarriage generally, as theories of intermarriage predict (Davis 1941; Kalmijn 1998).

Three broad sets of theories also guide our international comparisons. These are structural, modernization, and cultural theories. They often overlap, as we describe below. The theories also include derivatives concerning external constraints and racial scripts related to intermarriage.

Structural theories. Structural theories hold that more intermarriage occurs in less stratified or less segmented contexts (Davis 1941; Rodriguez-García 2015), largely because opportunities to meet for persons of distinct racial categories depend on factors

such as class distance and residential segregation (Kalmijn 1998; Qian and Lichter 2007). Although not specific to racial inequality, cross-national studies find higher odds of educational homogamy in countries with greater income inequality and returns to schooling (Schwartz 2013). One should expect, then, that intermarriage is lower in places with greater racial inequality. Moreover, scholars expect intermarriage to be more common among unmarried cohabiting couples (Qian and Lichter 2007; Wade et al. 2014; Moutinho 2004).

An important factor in structural explanations, particularly for international comparisons, is the role of external constraints. Qian and Lichter (2007) note how the breakdown of third-party constraints, such as so-called anti-miscegenation laws, have led to increases in black—white intermarriage in the United States. However, since these constraints are now historical, we might consider them as shaping current cultural attitudes and persistent racial taboos. Though effects may be waning, we expect that the state's role in creating external constraints continues to shape intermarriage, especially in the United States and South Africa (Marx 1997; Kalmijn 1998; Qian and Lichter 2007). Racial legal strictures against black people were common in all six countries or their colonies during slavery, which ended in the 19<sup>th</sup> century. However, post-abolition racial segregation laws, including anti-miscegenation laws, were promulgated in most states of the United States until 1967, and beginning with the Prohibition of Mixed Marriages Act in 1949, apartheid was the law of the land in all of South Africa until 1991 (Marx 1997). However, as far as we know, there were no such racial laws in Brazil, Cuba, France, or the United Kingdom in the 20<sup>th</sup> century (Telles 2004; Small and Solomos 2006).

Modernization theories. Modernization theories, which have their origins in classical sociology, may be particularly apt for making international comparisons of intermarriage. The basic argument of classic modernization theories, at the individual level, is that as societies develop, the basis of success shifts from ascribed characteristics like race to achieved characteristics like education (Schwartz 2010). With adulthood and marriage, parents lose control over the economic success of their children, and the influence of third parties (e.g., families, community members, the church, the state) over mate selection wanes (Blau and Duncan 1967; Goode 1970 [1963]; Schwartz 2010).

Assortative mating scholars similarly predict an increase in sorting on achieved characteristics and a decrease in sorting on ascribed characteristics with modernization (e.g., Kalmijn 1991; Rosenfeld and Thomas 2012). These studies tend to focus on longitudinal analysis of a single case – the United States – and they generally find that modernization leads to greater racial intermarriage over time.

However, other scholars note that ethnoracial identities are sometimes reinvigorated with modernization, as they provide usable bases for collective organization and action as well as a means for intimate connection in a world that is increasingly impersonal and uncertain (McKay 1982; Cornell and Hartmann 2006; Wimmer 2013). Similarly, anti-

blackness may be a precondition for the development of global capitalism, which is often associated with modernization (Bledsoe and Wright 2019; Inglehart and Baker 2000). While (nonracial) ethnicity may ebb and flow according to changing circumstances, race may be particularly rigid and enduring. In a series of essays in the early  $20^{th}$  century, W.E.B. Du Bois claimed the "color line" was not only American but global (Du Bois and Chandler 2014). Du Bois's concept of racialized modernity posited that race and racial divisions are at the core of modernization and constitutive of centuries-long colonialism (Itzigsohn and Brown 2020). These ideas, which have spawned much scholarship on race, suggest that racial and especially black—white boundaries endure in all societies, though they seem not to address variations in modernization and race among countries.

Cultural theories. Cultural theories posit that the extent of intermarriage may also depend on preferences, norms, and values. Individual preferences, norms, and values are often embedded in national contexts regarding immigrant integration (Rodriguez-Garcia 2015; Alba and Foner 2013) or are historically rooted in national racial ideologies and narratives that created scripts of racial mixing (Telles and Esteve 2019). In the United States, intermarriage has increased as popular attitudes against racial intermarriage have decreased considerably over the past several decades (Qian and Lichter 2007).

While intermarriage studies that gauge cultural attitudes about distinct groups in the same country or over time are well-known within the United States, we have little evidence of such cultural explanations internationally. Increasing attention to global antiblackness notes the persistence of disproportionate police violence against Afrodescendants in countries as diverse as Brazil, France, and the United States, as well as anti-blackness in global health care (Bledsoe and Wright 2019; Beaman 2020; Kyobutungi et al 2023). Those studies suggest a common culture of anti-blackness across countries. On the other hand, limited and descriptive evidence from the World Values Survey ranks the United States especially low in public racial attitudes. Although the survey instrument mentions "race" rather than blacks in particular, the survey reveals that France, the United Kingdom, and Brazil have the most positive racial attitudes while the United States has the most racist attitudes, with South Africa in between. Cuba was not included in the survey.

Racial scripts are important for explaining relatively high intermarriage rates in Latin America (Telles and Esteve 2019). This culture theory has foundations in historical structural factors, which were reinforced by cultural narratives. In their analysis of three American countries in an earlier census round, Telles and Esteve (2019) found that Brazil and Cuba had far greater intermarriage than the United States. They attribute this to an imbalanced sex ratio (originally a structural cause) during male-dominated colonization

<sup>&</sup>lt;sup>7</sup> These directly comparative findings, the only ones we could find, were taken from popular internet outlets: https://worldpopulationreview.com/country-rankings/least-racist-countries, https://www.usnews.com/news/best-countries/best-countries-for-racial-equality.

in Brazil and Cuba. This led men to seek women of color as mates, which led to a mixed-race population. These unions tended to be informal and taboo. Often they were also nonconsensual and violent. Following Swidler's (1986) theory of social scripts and Kalmijn's (1998) idea that the pervasiveness of intermarriage may also influence social norms about its acceptance in the future, Telles and Esteve (2019) theorize that intergenerationally transmitted cultural scripts led to some acceptance of intermarriage (and mixed-race categories). Intermarriage practices were further normalized with the introduction of nationalist narratives in the 20<sup>th</sup> century. We find this claim more credible than the cultural claims that Portuguese and Spanish colonizers were more racially tolerant because of their pre-Columbian experiences with the Moors as rulers (Degler 1986 [1971]). On close inspection, that version of a cultural theory is hard to prove, and it certainly does not align with the Latin American experience in colonization and slavery (see also McNamee 2020).

Afro-descendants have a short history in Europe compared to those in other countries. Although colonialization came out of Europe, few Afro-descendant people resided in France or the United Kingdom prior to World War II. The growing but still relatively small black populations in France and the United Kingdom are postcolonial products, originating mostly in immigration from their former African and Caribbean colonies. On the other hand, although both France and the United Kingdom declare themselves antiracist and promote unity and racial integration, the French and British state actions on race have been diametrically opposed. France prohibits race-based policies and gathering race statistics under a republican model of color-blindness and assimilation, while the British regularly collect race statistics and have enacted a series of antidiscrimination and positive-action policies that recognize racial diversity (Small and Solomos 2006; Beauchemin, Hamel, and Simon 2018; Bleich 2005; Favell 2020).

#### 4. Data

We examine six major countries that represent several global regions and have large black and white populations. Specifically, we sample countries that have requisite household population data and where blacks and whites each comprise at least 1 million people of the total national population. The countries are Brazil, Cuba, France, the United Kingdom, the United States, and South Africa. With the recent availability of anonymized and harmonized individual census microdata for the 2010 census round, this study updates the findings for the three Western Hemisphere countries that Telles and Esteve (2019) examined with 2000 census round data, and we add France, South Africa, and the

United Kingdom. Except for France and the United Kingdom, we draw each country's sample from the 2010 census round, available at the Integrated Public Use of Microdata Series (IPUMS) website (Minnesota Population Center 2020). In France, race data are not available in the census or in other surveys, but we use 2009 Trajectories and Origins (TeO) data, which proxy race (Beauchemin, Hamel, and Simon 2018). For the United Kingdom, we aggregate Labor Force Survey data from 2004 to 2010, since the available IPUMS scientific-use microdata from the UK census does not have the household-level information needed for estimating intermarriage. All data we use are publicly available.

Our samples consist of married and cohabiting coresident and heterosexual couples where the female partner is 25–34 years of age and where at least one member of the couple was born in (is native to) the country of interest. The age range restricts our analysis to young couples to minimize biases from union dissolution, remarriage, and educational upgrades after marriage (Schwartz 2010) and to capture couples formed in the same period. Since information is not available about where these marriages occurred, the birthplace restriction seeks to limit marriages, as much as possible, to those occurring in the country of interest.

Requisite data include a race variable with both black and white categories. (See Table A-1 in the appendix for details on the harmonization of racial codes across countries.) The term *black* refers to those enumerated in a named black category in all countries except France. Specifically, these categories are *preto* in Brazil, *negro* in Cuba, black/African American in the United States, black in South Africa, and black or black British in the United Kingdom. Similarly, we use white categories found in all countries except France.

The collection of race data in France is prohibited, but for the first time, French data include a proxy for race. We proxy black French as those who were born in sub-Saharan African countries or French overseas departments, such as Martinique, and those born in France to parents born in the same regions. Whites in France are those who were born in France and whose parents were born in France.<sup>9</sup> This methodology for proxying race using TeO data follows Beauchemin, Hamel, and Simon (2018).

We seek to be consistent in using a black category. Therefore we usually omit persons identified as mixed race. <sup>10</sup> Notably, there has not been a mixed-race category in the United States since 1930, and based on the historic one-drop rule, persons of black—

<sup>&</sup>lt;sup>8</sup> Colombia and Panama may also meet the requisite population size, but their censuses capture only the black and indigenous populations. The residual population (like the population in general) consists mostly of whites and mestizos, but whites (or mestizos) cannot be disaggregated with the data.

<sup>&</sup>lt;sup>9</sup> In a 2019–2020 survey, Llhommeau and Pujol (2022) found that only 1% of the French third generation, age 18–59, had one or more grandparents born in sub-Saharan Africa.

<sup>&</sup>lt;sup>10</sup> Intermediate categories are *moreno* and *mulato* in Cuba, "mixed" in the United Kingdom, and "colored" in South Africa. In France, the comparable intermediate category would have been calculated as persons having one parent born in sub-Saharan Africa and the other born in France.

white mixture have been considered black (Nobles 2000).<sup>11</sup> However, in Brazil we create a second set of estimates (Brazil II) using the more expansive definition of black (*negro*), which aggregates the census categories of black (*preto*) and brown (*pardo*). In Brazil, this definition of black is standard in policy and common in popular discourse (Telles 2004; Telles and Esteve 2019).<sup>12</sup>

Our models include the total number of coresident couples meeting the age and nativity criteria specified above, although we do not report results for racial categories besides black and white. In addition to race, we classified couples according to educational attainment (low, medium low, medium high, high) and type of union (marriage, cohabitation). We use these as controls. As mentioned before, cohabiting couples are controlled, since the proportion cohabiting varies widely by country and intermarriage tends to be higher among cohabitors (Telles and Esteve 2019). For the purpose of conciseness, we primarily employ the terms *marriage*, *husband*, and *wife*, with the understanding that we are encompassing all forms of unions.

Coresiding couples were identified on the basis of the spouse location variable (SPLOC), an IPUMS-constructed variable that identifies the location of the married or unmarried partners (if present) within the household. A similar approach was used for the UK and French data.

#### 5. Methods

For international comparability of countries with distinct racial compositions, we estimate white—black odds ratios (ORs) for endogamous unions. We chose odds ratios because they are independent of the relative size of the groups. Since we compare countries with such widely distinct racial compositions, racial intermarriage rates are clearly inadequate. In this context, odds ratios quantify the strength of the association between partners' race among coresident couples. They are defined as the ratio of the odds that a white male is married to a white female (rather than a black female) divided by the odds that a black male is married to a white female (rather than a black female). Due to symmetry, the same applies if blacks are taken as the reference group. If the OR equals 1, this shows complete independence between the male and female partners' races. If the OR is greater than 1, the male and female partners' races are associated (correlated), meaning there is a tendency among whites (or blacks) to be married to a white (or black)

<sup>&</sup>lt;sup>11</sup> We coded respondents who self-identified as both black and another race as black, following US Census convention.

<sup>&</sup>lt;sup>12</sup> Structurally, *pardos* have been shown to be just above blacks in the racial hierarchy (Telles 2004) but approximately halfway between blacks and whites in intermarriage and somewhat closer to whites (Telles and Esteve 2019).

partner. ORs can be obtained from simple contingency tables in which couples are classified based on the racial composition of the male and female partners. Alternatively, they can be estimated from log-linear models. These models have the advantage of allowing for more complex specifications regarding the number of control variables and specification of the hypotheses guiding the association between partners' races.

We use log-linear modeling to model the association between the races of wives and husbands. For two racial groups, blacks and whites, our baseline model (M1) has the following specification:

$$\log f_{ii} = \mu_0 + \mu_i + \mu_i + \mu_{ii}, \tag{1}$$

where  $\log f_{ij}$  is the natural logarithm of the expected frequency for row i (wife's race) and column j (husband's race),  $\mu_0$  is the constant,  $\mu_i$  is the parameter of row i,  $\mu_j$  is the parameter of column j, and  $\mu_{ij}$  is the interaction parameter between row i and column j. Odds ratios of endogamous couples are functions of model parameters. Model 2 (M2) adds four additional dimensions:

$$\log f_{ijklm} = \mu_0 + \mu_i + \mu_j + \mu_k + \mu_l + \mu_m + \mu_{ij} + \mu_{kl} + \mu_{ikm} + \mu_{jlm}, \tag{2}$$

where  $\mu_k$ ,  $\mu_l$ , and  $\mu_m$  are first-order parameters for wife's educational attainment (k), husband's educational attainment (l), and type of union (m).

We control for educational level<sup>13</sup> and cohabitation in a second model. Unfortunately, the available data do not allow us to adequately control for subnational areas. The French data had no geographic variables, and the size of the geographical level of the data for the other countries was too large to adequately capture local marriage markets. The available geographic areas for the five other countries were "countries" in the United Kingdom (e.g., England, Northern Ireland), 50 states in the United States, 26 states in Brazil, 15 provinces in Cuba, and 9 provinces in South Africa. When we applied these geographic controls, results were virtually unaffected.

We then plot intermarriage with modernization. Despite theory development, we were surprised that we could not find any empirical studies of how modernization is

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high = secondary completed; high = college completed.

<sup>&</sup>lt;sup>13</sup> The educational thresholds were for Brazil: low = zero to three years of school; medium low = four to seven; medium high = 8 to 11; high = 12 or more; for Cuba: low = primary; medium low = lower secondary; medium high = secondary completed; high = college completed; for the United Kingdom: medium low = GCSE and other qualifications; medium high = GCE and higher education; high = degree or equivalent; for the United States: low = no high school diploma; medium low = high school diploma; medium high = some college; high = college completed; for South Africa: low = less than primary; medium low = primary completed; medium

related to race across multiple countries.<sup>14</sup> Levels of modernization generally refer to development. We use the Human Development Index (HDI) as our indicator of modernization. Scholars have also used per capita GDP, urbanization, and the HDI (Stockemer and Sundstrom 2016; Inglehart and Baker 2000; Inglehart and Norris 2003). We show in Table 1 that these indicators tend to be closely correlated for the six countries we examine.<sup>15</sup>

Table 1: Modernization indexes: Human Development Index (HDI), per capita GDP, and percent urban for Brazil, Cuba, France, the United Kingdom, the United States, and South Africa

	HDI (2010)	Per Capita GDP (2017)	Percent Urban (2010)
United States	0.916	\$59,928	81
United Kingdom	0.912	\$44,920	81
France	0.879	\$44,033	78
Cuba	0.781	NA	77
Brazil	0.727	\$15,553	84
South Africa	0.664	\$13,526	62

Sources: HDI: https://countryeconomy.com/hdi?year=2010; per capita GDP: https://www.worldometers.info/gdp/gdp-per-capita/; percent urban; https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?view=chart.

#### 6. Results

Table 2 shows the racial composition of our sample by country and sex. The top panel shows the racial composition of women; men are represented in the bottom panel. The black population in our samples varies from about 2% in the United Kingdom (2.2% for males and 1.8% for females) to just over 70% in South Africa (72.2% and 72.1%). Results for men and women are similar. The white population varies from just under 90% in the United Kingdom (88.2% and 87.6%) to about 13% in South Africa (13.0% and 13.1%). The bottom row of the female and male panels shows an "other" category that consists of all non-white and non-black persons. The widest variance is in Brazil: Brazil is over 40% "other," and Brazil II is less than 2% "other." This variance is due to mixed-race persons (*pardos*, who are the vast majority of "others" in Brazil) being excluded from the black category in Brazil but included as black in Brazil II.

<sup>&</sup>lt;sup>14</sup> Though Inglehart and Norris's (2003) analysis of modernization and gender across a wide range of societies is a highly cited classic.

<sup>&</sup>lt;sup>15</sup> On the basis of these indicators, the United States, the United Kingdom, and France are the most modern nations, with a considerable gap between them and the other three countries. Among the bottom three, Cuba is the most modern, followed by Brazil (though its levels of urbanization are relatively high) and South Africa.

Table 2: Racial composition by country and sex among heterosexual couples where female partner is aged 25–34

	Brazil	Brazil II*	Cuba	France	United Kingdom	United States	South Africa
Racial composition							
Males							
White	46.6%	46.6%	66.5%	84.0%	88.2%	63.6%	13.1%
Black	9.1%	51.9%	6.3%	2.9%	2.2%	8.2%	72.2%
Other	44.3%	1.0%	27.2%	13.0%	9.6%	28.2%	14.7%
Females							
White	47.5%	47.5%	67.4%	83.3%	87.6%	63.8%	13.0%
Black	7.1%	50.7%	7.3%	2.2%	1.8%	6.8%	72.1%
Other	45.4%	2.0%	25.3%	14.4%	10.6%	29.4%	14.9%

<sup>\*</sup>The black category in Brazil II includes blacks (pretos) and those of mixed race (pardos).

Table 3 shows actual endogamy rates (top panel) and intermarriage rates (bottom panel) by country (columns) and by race and sex (rows). Although our primary analysis is based on endogamy for methodological reasons, we nonetheless describe intermarriage rates in Table 2, since they are more commonly understood in this literature. To take the US example, only 0.6% of white males and 2.0% of white females in our sample are married to blacks, while 15.3% of black males and 5.8% of black females are married to whites. In South Africa, where blacks greatly outnumber whites and where intermarriage is particularly low, only 1% or less of male and female whites and blacks are intermarried. By comparison, for Brazil II, 25% to 28.3% of black and white males and females are intermarried. Since the population of whites and blacks is fairly balanced in Brazil II, rates for blacks and whites are similar, but in all other cases, racial composition is asymmetric to various extents. Odds ratios are ideal for that reason.

A prominent feature of black—white intermarriage in the United States is an imbalanced sex ratio; such large gender imbalances are not found in any of the other countries. In our sample, 15.3% of African American men marry whites compared to only 5.8% of African American women (bottom rows). Thus, as the next-to-final row in Table 3 shows, US black men marry whites at 2.66 times the rate of black women. Although not at the US level, there is some imbalance (in the US direction) for the United Kingdom (1.53). There is also a sizable imbalance in the opposite direction for South Africa (0.54), but as we show in the next section, black—white intermarriage in that country is nearly nonexistent. For the other countries, intermarriage rates are fairly gender-balanced.

Table 3: Racial endogamy and exogamy and sex ratio of intermarriage by country and sex among heterosexual couples where female partner is aged 25–34

	Brazil	Brazil II*	Cuba	France	United Kingdom	United States	South Africa
Racial endogamy							
Males							
White	72.4%	72.4%	84.1%	87.8%	96.7%	91.3%	97.0%
Black	37.6%	72.8%	44.3%	31.1%	62.3%	75.1%	98.9%
Females							
White	71.0%	71.0%	83.0%	88.5%	97.4%	90.9%	98.1%
Black	48.1%	74.6%	38.3%	40.7%	77.0%	90.5%	99.0%
Ratio male/female							
White	1.02	1.02	1.01	0.99	0.99	1.00	0.99
Black	0.78	0.98	1.15	0.76	0.81	0.83	1.00
Black-white intermarriag	e						
Males							
White	4.1%	26.8%	2.7%	1.4%	0.4%	0.6%	1.0%
Black	28.0%	26.0%	28.8%	56.1%	27.7%	15.3%	0.1%
Females							
White	5.4%	28.3%	2.7%	2.0%	0.7%	2.0%	0.5%
Black	27.1%	25.0%	24.2%	50.9%	18.1%	5.8%	0.2%
Ratio male/female							
White	0.77	0.95	0.98	0.69	0.53	0.31	1.83
Black	1.03	1.04	1.19	1.10	1.53	2.66	0.54
N couples	342,327	342,327	34,815	2,814	22,627	101,001	138,634

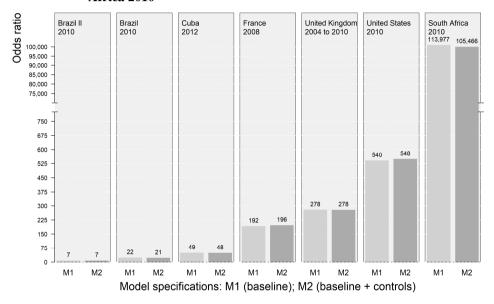
<sup>\*</sup>The black category in Brazil II includes blacks (pretos) and those of mixed race (pardos).

Figure 1 reveals large differences by country in black—white endogamy. In particular, Figure 1 plots two histograms for each country: odds ratios of endogamous unions by race and country without controls (M1) and odds ratios modeled with controls for type of union and education (M2). Figure 1 also charts endogamy odds ratios across countries. Endogamy refers to values above 1; exogamous odds ratios would take extremely low values.

Black—white intermarriage can be roughly interpreted as the opposite of black—white endogamy, but as we have explained, we use the more appropriate endogamy odds ratio measure. Exogamous odds ratios can be obtained by dividing 1 by the endogamous odds ratios. In other words, odds ratios for black—white intermarriage are the inverse of the odds ratios for endogamy. An endogamous odds ratio of 5 means that white males are five times more likely to partner with white females (as opposed to black females) than black males are likely to partner with white females (as opposed to black females). The same applies to black males partnering with black females (rather than white females)

compared to white males partnering with black females. The higher the value, the higher the level of racial endogamy (white-white or black-black) among couples. Thus the higher the value of racial endogamy, the lower the level of black-white intermarriage among couples.

Figure 1: Odds ratios of white and black endogamous unions among couples where the wife was 25–34 years of age in Brazil 2010, Cuba 2012, the United Kingdom 2004–2010, the United States 2010, and South Africa 2010



Note: M1: basic model; M2: model with controls: type of union and educational attainment.

Figure 1 results reveal widely distinct levels of endogamy. The lighter bars show odds ratios of endogamy and are calculated from the basic model. Odds ratios range from only 7 for Brazil II to 113,977 for South Africa. In Brazil, if we limit blacks to only those so classified in the census, endogamy rises to 22, but this is still well lower than any of the other six countries. In Interestingly, except for the extreme case of South Africa, the

<sup>&</sup>lt;sup>16</sup> We calculated comparable endogamy rates for Brazil in 1980 based on Telles (1993) and the racial composition at that time. Our results show endogamy rates of 351 for Brazil and 21 for Brazil II. This reveals a considerable increase in intermarriage but far more intermarriage than in the United States at the time and still more than we find for the United States in the 2010 census.

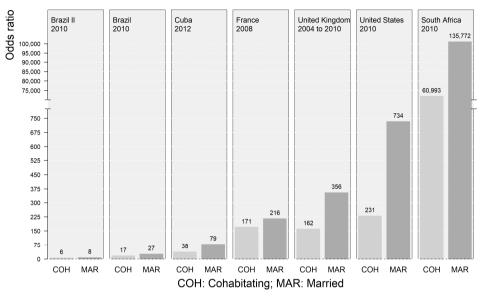
United States has the most endogamy, with an odds ratio of 548. Thus the United States trails four of the five comparison countries.

In a rough sense, Figure 1 shows four distinct levels of endogamy: low (Brazil and Cuba), moderate (France and the United Kingdom), high moderate (United States) and extreme (South Africa). Though it has higher levels than Brazil, Cuba also has low levels when viewed on a global scale. The United Kingdom and France have moderate levels. While the United Kingdom has clearly lower rates of endogamy, (greater black-white intermarriage) than the United States, French rates are even lower. France's exogamy rate of 196is about four times greater than Cuba's and almost two-thirds of the United Kingdom's. The final country, South Africa, is simply off the charts, as there is virtually no black—white intermarriage in that country.

The darker bars in each country show (Model 2) that controls in our log-linear models, for education and cohabitation, hardly made a difference in light of the large differences among countries. The order is maintained in Model 2 based on our log-linear models.

However, when we disaggregated cohabiting unions from formally married ones, we found large differences, especially in the United States. Figure 2 shows that for cohabitors, US levels are now in the moderate range, similar to those for France and the United Kingdom However, US rates become substantially higher among formally married partners. Figure 2 shows that in all countries, marriage is more endogamous than cohabitation. That is, black—white intermarriage is greater among cohabitors globally. In the United States, endogamy is fully three times as high among cohabiting unions (231) compared to formal unions (734). Some of the difference with the log-linear models is that cohabiting unions are relatively infrequent; cohabiting unions comprised only about one-sixth of the US sample. Large differences are also notable in the United Kingdom and South Africa, but they are closer to a 2:1 difference than the 3:1 difference of the United States. Disaggregation by type of union hardly made a difference in Brazil and France.

Figure 2: Odds ratios by type of union of white and black endogamous unions among couples where the wife was 25–34 years of age in Brazil 2010, Cuba 2012, the United Kingdom 2004–2010, the United States 2010, and South Africa 2010



Note: Country-specific models controlling for educational attainment.

Finally, Figure 3 shows the relation between endogamy and our proxy for modernization, the Human Development Index. Overall, we find no support that classic modernization is correlated with more intermarriage or that modernization hardens racial boundaries to lead to less intermarriage. Except for South Africa, levels of endogamy tend to be greater where there is more modernization – the opposite of what classic modernization theory would predict.

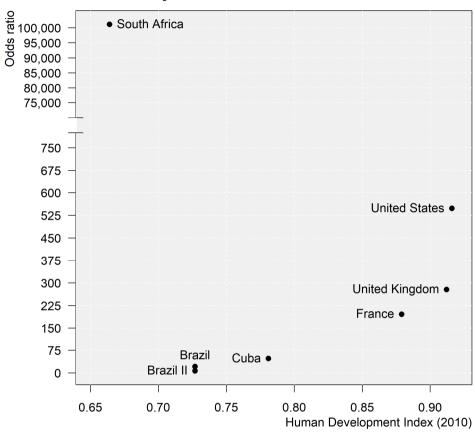


Figure 3: Scattergram depicting relation between endogamy (odds ratios) and Human Development Index for six countries

## 7. Conclusions and discussion

This article for the first time compares black—white intermarriage among continentally, demographically, and historically diverse countries. This includes six countries across four continents with diverse histories of racialization and racialized relations. As the sociological and demographic literature theorizes, we consider that black—white intermarriage levels measure the rigidity of social boundaries between black and white people. Moreover, as scholars increasingly point to a global, but unmeasured, anti-

blackness, we hypothesized that black—white relations are similarly intolerant or strained around the world. However, using statistics that control for the different size of populations by race, we find huge national differences. As far as we can establish, this is the first systematic study of black—white intermarriage across such a large and diverse set of countries with large black and white populations.

Studies of intermarriage tend to focus on the United States. Since these studies have found that black—white intermarriage has been consistently the lowest among major ethnoracial groups within the United States, they often conclude that the black—white boundary is particularly rigid. Our findings confirm Telles and Esteve's (2019) study of the 2000 census round, which showed that Latin American black—white intermarriage rates are far higher than those in the United States (Telles and Esteve 2019). This study shows that French and British intermarriage are between the Latin American countries and the United States, though France exhibits somewhat higher intermarriage than the United Kingdom. Overall we find that black—white boundaries in the United States are more rigid than in four of the five comparison countries, at least on the dimension of marriage. South Africa, with its extremely rigid racial boundaries, is an outlier.

Black—white intermarriage is greater in cohabiting unions in all six countries. This is especially true in the United States, where the odds ratios of endogamy are more than three times as great as those for formal unions. In the United Kingdom, they are about twice as high. In contrast, there are only small differences in France and Brazil by type of union. Interestingly, intermarriage among cohabitors puts US and UK rates in the French range. For the United States, our findings for cohabitation reveal a loosening of anti-blackness informally, but black—white intermarriage in formal marriages remains low by comparison to the other countries.

Only South Africa and the United States have had formal exclusionary laws and institutions. Of course, legal constraints against intermarriage no longer exist in either of these countries, but our results suggest that a history of legalized exclusion rather than current structural factors accounts for much of the large international differences in intermarriage. Such high endogamy in South Africa points to the pervasive role of external constraints from apartheid, which ended only 15 years before our study period. As a comparable figure, endogamy odds ratios would have been about 24,000 in the United States in 1980, which was also roughly 15 years after its anti-miscegenation laws ended (see note 1). This number would have been even higher and probably on par with South African levels if odds ratios were calculated for only US states where black—white intermarriage was illegal in 1965.

US historical trends suggest increasing acceptance of black—white marriage after these constraints ended. Black—white intermarriage in the United States has been steadily increasing since segregation and anti-miscegenation laws ended, as taboos against intermarriage and residential segregation have declined and social networks have slowly integrated. However, the much higher rates for cohabitors suggest that strong taboos are still maintained when it comes to formal marriage. Anti-miscegenation laws resulted from and shaped extremely rigid and intolerant systems of black exclusion in both the United States and South Africa. Even after their repeal, these laws apparently continue to buttress a de facto and informal culture of especially rigid black—white boundaries, which have been passed on across generations to date.

However the black population is defined, Brazil has the highest black—white intermarriage among these major countries. Cuban rates trail significantly but are similar to Brazil's when viewed from a global perspective. That similarity suggests a Latin American system where generations of intermarriage, mixing, and racial scripts regarding mixture have led to relatively high black—white intermarriage (Telles and Esteve 2019). Somewhat greater intermarriage in Brazil than in Cuba is surprising given very large structural differences. Cuba has much lower levels of racial inequality than Brazil (de la Fuente and Bailey 2021; Telles and Esteve 2019). Lower intermarriage in Cuba may arise from the island's history of US-sponsored segregation or its less robust race mixture narratives (Sawyer 2005; de la Fuente 2001; Telles and Esteve 2019). However, social science evidence on the Cuban case is particularly lacking.

Endogamy rates comparing the two Brazilian operationalizations (Brazil vs. Brazil II) show that most intermarriage is between mixed-race persons (*pardos*) and whites, though much intermarriage also occurs between whites and persons in the black (*preto*) category. This suggests not only that mixed-race persons cross the black—white boundary but also that presumably non-mixed blacks also often cross that boundary to marry whites. On the other hand, as Brazilian data show, many Brazilians (and probably Cubans) who identify in the black or white category are often of mixed ancestry themselves, since white and black are appearance-based categories (Telles 2004). Race mixture is also inherent in the very act of self-identifying in particular racial categories. Racial classification itself may also affect intermarriage (though we don't know in which direction).

French and British rates are intermediate between the United States and the Latin American countries. Their similarity suggests a common postcolonial pattern and that that the countries' different approaches to race have had little effect, if any, on intermarriage (Bleich 2005; Favell 2020). Lower endogamy than in the United States may have been unexpected, given such large increases in black—white marriage in the United States. This is probably due to a couple of reasons. A US history of legal constraints on intermarriage appears to drive persistently strong intermarriage taboos and thus to hold back black—white intermarriage rates. In contrast, while such taboos certainly exist in the European countries, the historical absence of legal constraints probably lessens their intensity. Moreover, the black populations of France and the United Kingdom may not be as embedded in these social norms since a domestic black population is fairly new in

both countries. Today, blacks are predominately immigrants or were socialized with immigrant parents. Colonialization and slavery for the large majority of British and French whites were in distant colonies; thus their racial attitudes may not be as deeply anti-black as those in the United States – although this is speculative. By contrast, in comparison to the Latin American countries, Europeans have not had the deeply historic racial scripts or narratives that have tolerated or arguably promoted racial intermarriage.

Within Europe, we find that French black—white intermarriage is somewhat greater than British intermarriage. This may seem surprising, because the United Kingdom has been attentive to race and promoting racial integration, with many antidiscrimination and positive-action policies and regular collection of racial statistics (Bleich 2005; Favell 2020). This compares to France's prohibition of race-based policies (including data collection). On the other hand, British colonial and integration policies relied on the indirect rule of groups defined by race or ethnicity, while corresponding French policies emphasized direct rule and have been highly assimilationist (Bleich 2005; Favell 2016). However, our French findings must be taken with some caution for methodological reasons. Indeed, France's ban on racial statistics has preempted the empirical study of race; therefore we must rely on proxy rather than direct racial data.

Classic modernization theory would have expected modernization or development to increase intermarriage. However, our bivariate analysis shows the opposite effect. South African intermarriage rates, the exception, may partly be a result of the nation's low level of modernization, but modernization cannot explain high intermarriage in Brazil and Cuba since they also have low modernization levels. Although race and racism are Western concepts that greatly affect all six countries, their intensity and particular manifestations depend on national contexts. Our findings suggest that explanations based on modernization, if there are any, are overwhelmed by the historic external constraints of South Africa and the United States and the racial scripts of Latin American countries. On the other hand, theorists argue that anti-blackness is a constitutive part of capitalism, and one could make a similar argument about its relation to modernization (Bledsoe and Wright 2019). Though they do not predict a straightforward correlation between modernization and development, DuBois and others (Itzigsohn and Brown 2020; Wimmer 2013; Cornell and Hartman 2006; Bledsoe and Wright 2019) would probably not be surprised by the generally positive relation we found. Du Bois was generally right about a global color line, but in his writings of more or less a century ago, he did not foresee the tremendous variation in the rigidity of that line.

Our study is only an initial foray into the cross-national study of the effect of modernization on race, but we decided to raise the issue, given the scholarly importance of modernization theory for explaining the cross-national variation of other sociological outcomes. As in Inglehart and Norris's (2003) classic work, the relation between modernization and gender is a complex one, involving two stages of development. A

similar type of relation, which considers historical factors, may also occur for race. Our limited historical comparisons of countries with historical constraints to those without suggests that these constraints overwhelm other effects of modernization.

We also find US exceptionalism regarding gender imbalances in black—white intermarriage. Black men are almost three times as likely to marry whites compared to black women. In all the other countries, sex ratios are more balanced. The sex ratio for the United States is surprising since anti-miscegenation laws especially sought to prohibit the intermarriage of black men and white women. Although race mixture during colonization in Latin America involved white men and women of color, there is hardly any gender imbalance in Brazil or Cuba today. There is some gender imbalance in the US direction for France and the United Kingdom, but it is clearly lower than in the United States. In contrast, white men and black women are more likely to intermarry in South Africa.

On the other hand, we were not able to control for residential segregation. However, we do not expect that it would directly account for the large national differences we found, except for the South African case. We believe this expectation is reasonable, but we cannot know for sure. Clearly, black—white intermarriage depends on the (structural) opportunities for black and white persons to meet; thus residential segregation would have been an important control. A more likely segregation-related explanation for the differences we found is that extreme residential segregation in previous decades contributed to a persistent culture of anti-blackness, which may slowly disappear with actual contact.

Perhaps the European–US differences would have become smaller if we had the necessary data to capture local residential segregation – but we expect not by much. The United States, noted for having high levels of black–white residential segregation in the late 20th century, continues to have segregation, but by 2010 the levels had become moderate (dissimilarity index less than 70) (Intrator, Tannen, and Massey 2016). Despite decreases, US rates are still higher than in Brazil (da Rocha and Berry 2020) and the United Kingdom (Iceland, Mateos, and Sharp 2011), but they are all in the moderate range. As far as we know there is no such data for Cuba or France. The exception to moderate rates of segregation is South Africa, where residential segregation continues to be extreme (Van Eeden 2015). There, opportunities for black and white persons to meet are nearly nonexistent, which probably explains much of the country's off-the-charts endogamy rates.

Methodologically, different analysts may quibble over our models, such as using a single model or introducing comparable parameters or uncertainty/statistical tests. However, we find such large differences that such methodological issues are unlikely to alter our major findings about cross-national differences.

We do not include mixed-race categories in our analysis. Had we aggregated them with the black category, as we did in Brazil II, we would have found greater intermarriage in the other four non-US countries.<sup>17</sup> The United States, by contrast, does not have an intermediate category, although that is beginning to change with the census option to choose more than one race. Since US persons who are descendants of black—white mixtures are generally counted in the black category (Nobles 2000), US black—white endogamy would be still higher (and intermarriage lower) in relation to the four (non—South African) countries.<sup>18</sup>

Our findings reveal that even though racism and anti-blackness are impediments to marriage in all six countries, black—white intermarriage varies widely. Intermarriage or endogamy rates, a leading indicator of the quality of racialized relations (Gordon 1964; Kalmijn 1998; Alba and Nee 2003), show that the fluidity or rigidity of the black—white boundary varies widely. These findings might also suggest that racism and anti-blackness matter more in some societies than others, but a fuller picture of other indicators is warranted before we come to such conclusions. For example, Brazil's high intermarriage rate coexists with the near absence of blacks in the middle class and with police targeting of black youths (Telles 2004). Similarly, for the United States, high rates of intermarriage of Asian American females and white men occur along with other indicators showing Asian American exclusion (Lee and Kye 2016). Thus we cannot irrefutably conclude that US intermarriage rates show that the black—white boundary is particularly rigid from a global perspective or that whites are particularly intolerant of blacks in the United States. For that, we would need a broader set of indicators.

Our international analysis of black—white intermarriage sheds new light on racialized relations, an area that has lacked systematic comparisons across countries around the world. In many ways, our study contributes to the incipient study of race and racism internationally. Just on intermarriage, many more such studies are needed, including those that can provide deep understandings of national differences and how particular components of intermarriage (e.g., race—sex ratios, regional distributions, laws, racial classification and identity, social norms, and racial disparities in education, occupation, wealth, and so on) are shaped in each country. Studies revealing increasing black—white intermarriage in the United States suggest optimism, but our research implies that despite progress, US rates continue to lag.

<sup>17</sup> We ran a separate analysis, which unsurprisingly shows this for all five non-US countries.

<sup>&</sup>lt;sup>18</sup> We do not address intermarriage between persons in mixed-race categories and those in black categories. For Brazil and Cuba in 2000, see Telles and Esteve (2019).

## 8. Acknowledgments

We thank Suzanne Model, Lucas Drouhout, Patrick Simon and the anonymous reviewers for their comments. For Andrés Castro: RTI2018-096730-B-I00 and Department of Research and Universities of the Catalan government (2021-BP-00027). For Albert Esteve: European Research Council, HE-ERC-2021-AdG-GA, No. 101052787-CORESIDENCE; Ministerio de Ciencia e Inovación, Gobierno de España, FERTIN project PID2021-124267OB-I00.

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# Appendix

Table A-1: Harmonization of racial classification by country

Country	Brazil	Brazil II	Cuba	France	United Kingdom	United States	South Africa
Data source	IPUMS 2010	IPUMS 2010	IPUMS 2012	Trajectories and Origins 2008	Labor Force Survey 2004– 2010	IPUMS 2010	IPUMS 2011
Race							
White	RACE = white (10)	RACE = white (10)	RACE = white (10)	If REGIONNAISM or REGIONNAISP, mother's or father's place of birth = 11 (France), 41 (Portugal), 42 (Spain), 43 (Italy), 44–48 (other European countries, including Switzerland)	ETH01 = white (1)	RACE = white (10)	RACE = white (10)
Black	RACE = black (20)	RACE = black (20) or mixed race (50)	RACE = black (20)	If REGIONNAISM or REGIONNAISP, mother's or father's place of birth = 12 (Guadalupe, French Guyana, Martinique, and Reunion) or 24 (sub-Saharan countries)	ETH01 = black (4)	RACE = black (20)	RACE = black African (21)
Other	RACE = Asian (40) or indigenous (30) or mixed race (50)	RACE = Asian (40) or indigenous (30)	RACE = mixed race (50)	Any other combination of REGIONNAISM and REGIONNAISP	ETH01 = different than white (1) or black (4)	RACE = different than white (10) or black (20)	RACE = Asian (40) or colored (54) or other (60)