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Beyond Within-Group Mobility: Racial and Ethnic Gaps in Sibling Correlations in Latin America and the Caribbean*

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Abstract

This paper studies how ethnoracial stratification shapes intergenerational persistence in education in Latin America and the Caribbean. Standard within-group mobility measures compare individuals only to others in the same group and may therefore understate the barriers faced by historically disadvantaged populations whose average educational attainment remains far below the national mean. We address this limitation by decomposing sibling correlations in schooling into two components: within-group between-family transmission and the structural position of each group in the national distribution. Using census microdata for 19 countries, we show that within-group sibling correlations are high across the region, but that group rankings change substantially once structural position is taken into account. In particular, Indigenous populations often appear only moderately less mobile within their own distributions, yet exhibit much higher persistence in the overall national distribution because their group means remain well below national averages. Afrodescendant patterns are more heterogeneous. These results suggest that ethnoracial gaps in mobility cannot be fully understood from within-group measures alone and that policies aimed at equalizing opportunity must address both family-level transmission and structural gaps in educational attainment.

JEL Codes: D63, I24, J15, J62, O15

Keywords: Sibling correlations, Educational mobility, Intergenerational mobility, Race and ethnicity.

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I Introduction

Do Indigenous and Afrodescendant families in Latin America and the Caribbean (LAC) face greater intergenerational persistence in schooling than the rest of the population? This paper addresses this question using a decomposition approach that accounts for a feature of ethnoracial stratification that standard within-group measures ignore: the fact that Indigenous and Afrodescendant populations — roughly 30 percent of the region's population (Telles et al. 2025) — sit persistently far below national schooling averages. A measure that ignores these long-term differences will systematically underestimate their immobility. This problem, identified by Hertz (2008), was used by Jácome et al. (2025) to show that, in the United States, Black-white income convergence accounts for roughly half of the mid-century rise in full-population mobility. Following Karlson & In (2025), we decompose sibling correlations in schooling across 19 countries from LAC into group-specific contributions — for Indigenous peoples, Afrodescendants, and non-Indigenous/non-Afrodescendants — that capture persistence in the overall national distribution rather than within each group's own. This allows us to assess not only whether these groups exhibit higher within-group persistence, but how much of their immobility in the overall distribution stems from differences in group means versus within-family transmission processes, a distinction with direct implications for policy as explained later.

The sibling correlation is particularly well-suited to this setting for two reasons that, together, address the central data challenge facing intergenerational mobility research in low- and middle-income countries. First, unlike intergenerational regression coefficients which require linked parent-child data across time, the sibling correlation can be estimated from a single cross-sectional census by identifying co-resident siblings — the type of data that exists at scale across Latin America and the Caribbean.[1] Longitudinal data linking parents

[1]Household surveys with retrospective information can be used to estimate intergenerational mobility without using coresident samples (e.g., Neidhöfer et al. 2018, Van der Weide et al. 2024, Muñoz & Van der Weide 2025), however, their sample sizes are generally not large enough for a dissagregation by race and ethnicity.

and children with the country coverage needed for this analysis simply do not exist in the region. Second, and importantly, using co-resident samples does not introduce meaningful bias into sibling correlation estimates. Ahsan et al. (2025) provide the first direct evidence on this question using data from six countries, showing that the co-residency bias in sibling correlation averages just 4.3 percent — far smaller than the 10.25 percent bias in the intergenerational regression coefficient — because sample truncation causes offsetting biases in the numerator and denominator of the sibling correlation formula. Co-resident sibling correlation estimates also preserve the correct cross-country ranking 90–95 percent of the time. Beyond these data advantages, the sibling correlation is an omnibus measure that captures the full influence of shared family and community background, including unobservable factors such as networks, aspirations, neighborhood quality, and school access, that parent-child measures do not.

We find that within-group sibling correlations are high throughout the region, ranging from roughly 0.34 to 0.71, and group rankings vary considerably across countries without a single dominant pattern.[2] Afrodescendants display lower within-group persistence than the non-Afrodescendant/non-Indigenous reference group in most countries, suggesting greater mobility within their own distribution. Indigenous peoples cluster closer to parity, with within-group sibling correlations similar to or moderately above the reference group in most settings, and the highest sibling correlations concentrated in countries with large Indigenous populations, such as Bolivia, Panama, and Paraguay. This variation, however, reflects persistence only relative to each group's own mean, a limitation that the decomposition directly addresses.

The picture changes substantially when we account for structural position. Within-group transmission (B_g) exceeds the structural position component (A_g) for both minority groups in almost all settings, confirming that the intergenerational reproduction of disadvantage within groups is the dominant engine of persistence. Nevertheless, because Indigenous group means

[2]This refer to sibling correlations by group for all countries using data near year 2010.

lie persistently far below national schooling averages, A_g is large enough to substantially alter the group ranking: once it is added to B_g, Indigenous persistence in the overall distribution exceeds that of the reference group in nearly every country in the sample, often by a wide margin. The contrast is most extreme in Panama and Paraguay, where Indigenous $A_g + B_g$ is approximately 3.3 times that of the reference group. For Afrodescendants, the pattern is more heterogeneous: in several countries — including Belize, Guyana, Colombia, and Panama — higher within-group mobility more than offsets the structural position, leaving total Afrodescendant persistence below the reference level; in others, adding A_g brings it above parity.

We next examine how each group's total persistence, weighted by its population share, translates into its contribution to the national-level sibling correlation. The non-Afrodescendant non-Indigenous majority dominates the aggregate simply by demographic weight. But in countries with large Indigenous populations, e.g., Bolivia, Guatemala, and Panama, Indigenous families account for roughly 40–50 percent of the overall national sibling correlation despite representing between one-fifth and one-half of sibling pairs. This disproportionate contribution is driven by the structural position component: their within-group ICC alone would imply a contribution roughly proportional to their population share. The finding illustrates the central limitation of standard within-group measures: they systematically undercount the immobility of the groups most disadvantaged in the overall distribution.

Two further results complete the picture. Tracking the seven countries with multiple census waves, we find that, consistent with broad educational expansion across the region, within-group sibling correlations declined for nearly every group while the structural position component A_g moved more dramatically and in heterogeneous directions. For within-group persistence, Guatemala is the salient exception: the within-group sibling correlation for Indigenous peoples rose from 0.50 in 1964 to 0.63 in 2018, even as the non-Indigenous correlation fell, suggesting that educational expansion increased rather than reduced the role of family background for those gaining access. For total persistence in the overall distri-

bution ($A_g + B_g$), patterns are more varied: Guatemala's Indigenous structural position narrowed substantially as group means converged toward the national average across six census waves; Panama's Indigenous population remains among the most structurally disadvantaged, though its log ratio has declined steadily from 1.39 in 1990 to 0.98 in 2023, indicating a meaningful narrowing across four waves while total persistence remains approximately three times that of the reference group; Bolivia shows a non-monotonic trajectory with the Indigenous gap rising through 2012 before partially reversing by 2024; and Chile shows a rising Indigenous gap as group mean convergence has not kept pace with overall educational expansion. Absolute upward mobility, that is, the probability of completing secondary schooling when parents did not, shows a parallel pattern: Indigenous peoples face substantially lower absolute mobility in most countries while Afrodescendants are broadly at parity with the reference group, and the countries where Indigenous peoples face the greatest relative persistence also tend to display the largest absolute mobility deficits.

These findings make three contributions to the literature. First, we provide the first systematic, multi-country evidence on how race and ethnicity shape the intergenerational transmission of socioeconomic status in LAC through the lens of sibling correlations. Previous work has documented group-level gaps in earnings and schooling (Patrinos & Psacharopoulos 1996, Hall & Patrinos 2006, Hernandez et al. 2006, Telles et al. 2025) and shown that darker-skinned individuals face persistent barriers to intergenerational upward mobility across the region (Woo-Mora 2025, Monroy-Gómez-Franco et al. 2026). However, existing studies either use skin tone rather than self-reported ethnic categories, rely on absolute mobility measures rather than the omnibus sibling correlation, or do not decompose population-wide persistence into group-specific contributions. Our paper addresses all three gaps simultaneously. Second, we show that standard within-group sibling correlations are a systematically misleading guide to group-specific immobility in this context, because the between-group component — the structural distance of Indigenous and Afrodescendant group means from the national average — is large enough to substantially alter the picture of which groups face the greatest

barriers to mobility. In doing so, we are the first to apply to a racial and ethnic context in LAC the decomposition developed by Karlson & In (2025), which itself extends the insight of Hertz (2008) from intergenerational elasticities to sibling correlations. A related application of this logic to the United States is Jácome et al. (2025), who show that between-group income gaps play a first-order role in shaping both the level and the trend of full-population intergenerational mobility. Our contribution relative to that paper is not methodological but empirical: we bring this framework to bear on the racial and ethnic stratification of LAC, extend it from a single country to a cross-national comparative setting, and shift the outcome from earnings to schooling, where census-based data allow coverage across the region. The transition from elasticities to sibling correlations also matters substantively, because the latter capture a broader set of family influences — including neighborhood, social networks, and unobservable household characteristics — that are particularly salient where ethnic and racial stratification is deeply embedded in place-based inequalities. Third, we contribute to the growing cross-national literature on sibling correlations (Grätz et al. 2021, Ahsan et al. 2023, Anderson et al. 2024, Muñoz & Jaque 2026) by being the first to apply a group decomposition to this measure in a developing-country context, opening a path for similar analyses of how ethnic, racial, or caste divisions shape population-wide patterns of intergenerational persistence elsewhere.

Our results also carry policy implications. If the immobility of Indigenous and Afrodescendant families is driven primarily by the A_g component (i.e., by the structural distance of their group mean from the national average) then interventions targeting within-family transmission processes alone would leave most of the immobility untouched. The persistence of these groups in the overall distribution reflects the cumulative effect of labor market discrimination, unequal access to schooling and public services, and historical dispossession, rather than just the within-family reproduction of disadvantage. This distinction calls for policies that address structural barriers alongside intergenerational transmission mechanisms.

The remainder of the paper is structured as follows. Section II describes the data.

Section III presents the methodology. Section IV reports the main findings. Section V concludes.

II Data

Data sources. We use census microdata obtained from two sources: IPUMS International (Ruggles et al. 2025) and national statistical offices (NSOs). For some countries, we rely on IPUMS, which provides harmonized, nationally representative samples (typically 10 percent of the full-count censuses) for a wide range of economies. For those countries not covered by IPUMS, we use full-count or sample census microdata obtained directly from NSOs. All sources provide microdata organized at the household level containing information on educational attainment, demographic characteristics, and racial or ethnic self-identification, which are the three building blocks of our analysis. Our database covers 19 countries in LAC, listed in Table A1 along with the specific census waves used for each country. This set of countries accounts for the large majority of the region's population and includes all major countries for which harmonized racial and ethnic categories can be constructed across at least one census wave. For the cross-sectional analysis — which constitutes the main results in Sections IV — we use each country's census wave closest to 2010, the round with the broadest simultaneous coverage across countries.[3] The temporal analysis in the same section draws on all available waves for countries with multiple comparable observations.

Identification of coresident siblings and age range. We identify sibling groups from household rosters using variables describing each household member's relationship to the household head, following the approach of Muñoz & Jaque (2026). In IPUMS datasets, this relies on the `pernum_pop` and `pernum_mom` variables, constructed by IPUMS to indicate the probable father and mother of each household member (Sobek & Kennedy 2009): all individuals sharing the same probable father are treated as siblings, with the probable mother

[3] We use 2024 wave rather than 2007 wave in El Salvador because the latter had too few observations for Afrodescendant and Indigenous individuals.

used as a fallback when father information is missing. For individuals with no parental link and for non-IPUMS datasets, sibling groups are identified from the relationship-to-head variable, grouping children of the household head, the head and their siblings or stepsiblings, and the spouse or partner of the head and their siblings or stepsiblings. Full details of the identification procedure are provided in the Appendix.

We restrict the sample to siblings aged 21 to 30 years, with years of schooling censored at 15, following the baseline specification of Muñoz & Jaque (2026). The lower bound of 21 allows sufficient time to complete at least some post-secondary education — particularly relevant for more developed countries in the sample — while ensuring that most individuals in the age range still coreside with their parents. The upper bound of 30 enables us to define cohorts by birth decade, facilitating comparability across census rounds and with existing cross-national databases on intergenerational mobility (Van der Weide et al. 2024). An important concern with coresident samples is coresidence bias — the possibility that the likelihood of siblings living together is systematically related to their educational outcomes. Ahsan et al. (2025) provide direct evidence that this bias is small for sibling correlations, averaging just 4.3 percent across six countries and substantially smaller than the analogous bias in intergenerational regression coefficients, because sample truncation causes offsetting effects in the numerator and denominator of the ICC formula. Country rankings are also preserved with high reliability (90–95 percent of the time) under coresident sampling.

Race and ethnicity. Racial and ethnic identity is a multidimensional concept that countries in LAC have measured in heterogeneous ways. The census questions used in our sample reflect a variety of conceptual approaches — including ancestry, cultural belonging, self-identification with a named group, and physical appearance — and the specific categories offered to respondents differ across countries and over time (Telles et al. 2025). This heterogeneity poses a fundamental challenge for cross-national comparability and for comparability across census waves, as recognized in the literature (e.g., Telles et al. 2015). We map all available responses into three groups: *Indigenous*, *Afrodescendant*, and *Non-*

Afrodescendant/non-Indigenous.

Census questions in our sample take one of three forms. The first is a binary yes/no question asking whether the respondent belongs to an Indigenous or Afrodescendant group; Chile, Costa Rica, El Salvador, Guatemala, Nicaragua, Panama and Paraguay use this format, with Chile, Costa Rica, El Salvador and Panama including separate questions for Indigenous and Afrodescendant identity. The second and more common form asks respondents to self-identify with one category from a predefined list; Barbados, Belize, Bolivia, Brazil, Colombia, Cuba, Ecuador, Guyana, Honduras, Peru, Suriname and Uruguay all use this format, though the lists differ across countries. We classify each available response category as Indigenous, Afrodescendant, or Non-Afrodescendant/non-Indigenous according to the mapping detailed in Table A2. In some countries, the available categories only permit a two-way distinction; in those cases we omit the missing group from the decomposition for that sample (the unidentified group is absorbed by the Non-Afrodescendant/non-Indigenous group).

Several country-specific features of the race and ethnicity data warrant mention. In Brazil, the Indigenous category was not included in the 1980 census, so the decomposition for that wave is limited to two groups. Both Brazil and Uruguay incorporate supplementary questions to improve coverage: Brazil asks individuals who do not initially self-identify as Indigenous whether they nonetheless consider themselves Indigenous, while Uruguay asks respondents reporting multiple affiliations to identify their primary group. In Chile, an Afrodescendant category is only available in the 2024 census, implying that earlier waves are restricted to two groups. In Cuba, no Indigenous category is available in any year. In Guatemala, waves prior to 2018 do not include an Afrodescendant category; similarly, in Panama, this category is absent in waves prior to 2010. Finally, in the available waves for Nicaragua and Paraguay, the Afrodescendant category is not present. These limitations are reflected in Table A1 that details the availability of information by census wave and are accounted for in our estimation strategy by retaining a group in the decomposition only

when it contains at least 90 sibling pairs.[4]

A related concern is that changes in census wording, response categories, enumeration practices, or social patterns of self-identification may affect not only the availability of racial and ethnic categories, but also the composition of the population classified into each group. This concern is especially relevant in cases where group shares change sharply across census waves, as shown in Table A3. Estimates should therefore be interpreted as referring to the population identified under that census-specific classification, rather than necessarily to a fully comparable group over time.

To apply the decomposition at the family level, we assign each sibling pair to one of three groups based on the two siblings' classifications. When both siblings belong to the same group, the pair is assigned to that group. When one sibling is classified as Indigenous or Afrodescendant and the other as Non-Afrodescendant/non-Indigenous, the pair is assigned to the minority group. When one sibling is Indigenous and the other Afrodescendant, the pair is assigned to whichever of the two groups is smaller in that sample — a rule that minimizes the loss of minority-group observations.[5]

Table 1 reports the share of sibling pairs in each racial and ethnic group for every country in our sample, focusing on the circa 2010 wave. The Non-Afrodescendant/non-Indigenous group is the largest in most countries, reflecting its demographic predominance across Latin America and the Caribbean. Afrodescendants account for a substantial share of sibling pairs in Barbados, Brazil, Cuba, Guyana, and Suriname, while Indigenous groups represent a large proportion in Bolivia, Guatemala, and Peru.[6]

[4]The Indigenous category was removed for the samples: Brazil 1960, Suriname 2012 and Uruguay 2006. The Afrodescedant category was removed for Bolivia 2012.

[5]The share of mixed-group pairs is very small in all samples (see Table A3).

[6]Table A3 provides detailed shares for all available waves.

Table 1: Sibling shares by group

Sample	Afrodescendant	Indigenous	Non-Afrodescendant/ non-Indigenous	Obs.	Sib. groups
Barbados 2010	93.41	-	6.59	7,122	3,204
Belize 2022	28.17	11.41	60.41	9,708	4,342
Bolivia 2012	0.20	33.48	66.32	22,612	10,143
Brazil 2010	55.81	0.42	43.77	695,970	311,676
Chile 2017	-	12.59	87.41	449,991	213,380
Colombia 2005	10.40	7.45	82.15	108,686	47,957
Costa Rica 2011	7.53	1.53	90.94	18,119	8,198
Cuba 2012	45.82	-	54.18	17,964	8,704
Ecuador 2010	5.90	4.87	89.23	37,235	16,802
El Salvador 2024	0.47	0.79	98.73	247,756	113,759
Guatemala 2018	0.19	45.14	54.67	712,295	305,640
Guyana 2012	31.35	11.26	57.39	9,361	4,222
Honduras 2013	1.52	7.85	90.63	27,582	12,100
Nicaragua 2005	-	5.73	94.27	22,158	9,540
Panama 2010	10.03	11.23	78.74	8,316	3,761
Paraguay 2002	-	0.90	99.10	15,009	6,605
Peru 2017	3.38	23.40	73.22	963,241	444,311
Suriname 2012	36.30	2.52	61.18	1,664	745
Uruguay 2011	4.59	2.08	93.33	74,920	34,588

Notes: The table reports the share of each group classified by race and ethnicity for each country in the circa 2010 wave. For corresponding shares across all available waves, see Table A3. Columns 1–3 present the percentages of Afrodescendant, Indigenous, and Non-afrodescendant/non-Indigenous populations, respectively. Column 4 reports the number of observations in each sample, and Column 5 reports the number of sibling groups used in the analysis.

Educational attainment. Our main outcome variable is years of schooling. For most countries and waves, this measure is directly reported; for the remaining cases, we impute years of schooling from the highest educational level completed. Specifically, we assign 2 years to individuals with no education or incomplete primary, 8 years for completed primary, 12 years for completed secondary, and 15 years for completed tertiary education.[7] These values are based on median years of schooling observed in IPUMS samples where both measures are available.[8] For all countries, years of schooling is top-coded at 15. Table A1 indicates the educational measure used in each country-wave.

For the estimation of absolute upward mobility, we also use parental education, defined as the highest level attained by either the father or the mother. Table A4 reports summary statistics for education across all samples.

Across countries, attainment has increased substantially over time. For example, Brazil shows a marked rise from low average schooling levels in earlier decades to substantially higher levels by the 2000s, while Chile and Colombia exhibit steady improvements in more recent periods. Similar upward trends are observed in Central American countries such as El Salvador and Guatemala, although from lower initial levels. In cases where educational attainment is imputed from categorical measures, the resulting averages remain consistent with the broader patterns observed in countries with directly reported years.

Overall, the data reveal a clear pattern of educational expansion across the region, with rising average years of schooling and a gradual shift toward higher levels of completed education, particularly secondary attainment.

[7] An exception is made for Colombia 2018 and Uruguay 2023, for which we use the original years of schooling derived from the reported educational levels in the respective datasets.

[8] This imputation approach follows Muñoz & Jaque (2026), who show that estimates based on imputed years closely align with those based on directly reported years across a large set of IPUMS samples. Further details are provided in the Appendix.

III Methods

Sibling correlations as a measure of intergenerational persistence. Our measure of intergenerational persistence follows Muñoz & Jaque (2026), who estimate sibling correlations in schooling across 128 countries using the same census data (along with additional surveys) that underlie our analysis. As in that paper, and in the well-established literature it builds on (e.g., Björklund et al. 2002, Mazumder 2008, Bingley & Cappellari 2019), we treat the sibling correlation as a comprehensive measure of the role of shared family and community background in shaping individual outcomes. The approach requires no information on specific family inputs; rather, it captures all factors that siblings share — parental education, income, wealth, neighborhood conditions, school quality, social networks, and genetic endowments, to the extent that these are common across siblings.

We decompose the observed variation in educational attainment as follows:

$$Y_{ij} = \mu + U_j + E_{ij} \tag{1}$$

where Y_{ij} denotes years of schooling for sibling i in family j, μ is the population mean, U_j is a family-specific component common to all siblings in family j, and E_{ij} is an individual deviation from the family component. The two error terms are orthogonal by construction, so the total variance in schooling can be written as $V(Y) = V(U) + V(E)$. The sibling correlation is then the intraclass correlation coefficient (ICC):

$$\rho = \text{ICC} = \frac{V(U)}{V(U) + V(E)} = \frac{V(U)}{V(Y)} \tag{2}$$

which equals the share of total inequality in schooling attributable to factors shared by siblings. A higher value indicates lower educational intergenerational mobility — siblings are more alike because family and community background plays a larger role. We estimate the variance components in equation (2) by restricted maximum likelihood (REML), following

Mazumder (2008, 2011) and Muñoz & Jaque (2026).

Decomposition into group-specific contributions. The standard ICC in equation (2) treats the population as a whole and does not distinguish between groups. A natural extension is to ask: how much of a given group's immobility reflects processes *within* that group's own distribution and how much reflects the group's structural position in the *overall* national distribution? These two sources of immobility call for different policy responses, yet the standard within-group ICC conflates them by using each group's own distribution as its benchmark.

To separate these forces, we follow Karlson & In (2025), who extend the framework of Hertz (2008) from intergenerational elasticities to sibling correlations. The key step is to apply the Law of Total Variance to the family component $V(U)$. Suppose each family belongs to a racial or ethnic group g, with population share π_g and group mean $\bar{Y}_g$. Then:

$$V(U) = \sum_g \pi_g \left[\underbrace{(\bar{Y} - \bar{Y}_g)^2}_{A_g} + \underbrace{V(U_g)}_{B_g} \right] \tag{3}$$

where $\bar{Y}$ is the overall population mean. Substituting into equation (2):

$$\text{ICC} = \frac{\sum_g \pi_g \left[A_g + B_g \right]}{V(Y)} \tag{4}$$

The two components of the decomposition have distinct interpretations. $B_g = V(U_g)$ is the within-group between-family variance: it captures the degree to which families within group g transmit advantages or disadvantages to their children, holding the group's own mean fixed. $A_g = (\bar{Y} - \bar{Y}_g)^2$ is the between-group component: it measures the squared distance of group g's mean from the national mean. In the context of Indigenous and Afrodescendant populations in LAC — whose group means lie persistently below the national average as a result of historical exclusion and ethnoracial stratification — this component captures

what we call the group's *structural position* in the overall distribution. We use this term throughout to refer to the contribution of between-group mean differences to immobility, distinguishing it from B_g, which reflects within-group transmission. Crucially, a group can display a low within-group persistence (high within-group mobility) while simultaneously exhibiting high A_g because its members start from a position far below the national mean. Ignoring A_g therefore understates the immobility faced by historically marginalized groups in the overall distribution.

The sum $A_g + B_g$ defines a distribution-based persistence measure for group g — one that positions the group within the full national distribution rather than within its own. Multiplied by the group's population share, $\pi_g(A_g + B_g)$ gives the group's total contribution to the overall ICC. Equation 4 makes clear that larger groups mechanically contribute more to overall persistence, and that a group's contribution rises either when it is more numerous (π_g), when its within-group transmission is stronger (B_g), or when its mean schooling is further from the national average (A_g).

Estimation. We estimate the ICC and its decomposition using sibling *pairs*.[9] For each sample, we estimate the within-group variance components $V(U_g)$ and $V(E_g)$ by REML, recover B_g directly, and compute A_g from the group and population means. We retain a group in the decomposition only if it contains at least 90 sibling pairs, to ensure that variance estimates are sufficiently precise.

Absolute upward mobility. To complement the relative persistence measures above, we also estimate absolute upward mobility in education following Neidhöfer et al. (2018): the share of individuals aged 21–30 who completed secondary education among those whose parents did not. This measure captures a different dimension of mobility — the probability of surpassing one's parents' educational level at a specific threshold — and is directly comparable across groups and countries without requiring variance decomposition. Absolute

[9]When a sibling group contains more than two individuals, we randomly select two siblings using a uniform distribution. With balanced data (i.e., two observations per family) the group decomposition in equation (4) is exact (Karlson & In 2025). Figure A1 shows that the difference between the estimates of ICC with all siblings and with pairs is negligible.

upward mobility in education has been used to document racial and ethnic gaps in Latin America by Woo-Mora (2025) and CAF (2022), providing a useful point of comparison for our relative persistence estimates. We compute it separately for each racial and ethnic group using parental education measured as the highest level attained by either parent. We present this as a descriptive complement to the ICC decomposition rather than a primary result.

IV Results

We estimate within-group sibling correlations and apply the Karlson & In (2025) decomposition across 19 Latin American and Caribbean countries. The main cross-sectional results use each country's census wave closest to 2010 that permits racial/ethnic classification. We also examine temporal trends for the seven countries using multiple comparable waves. The sample encompasses three groups — Afrodescendants, Indigenous peoples, and non-Afrodescendant/non-Indigenous individuals — though not all groups are identifiable in every country (see Table 1). We organize the results around four findings. We first document within-group persistence by group and country; we then decompose overall persistence into the structural position component (A_g) and the within-group transmission component (B_g); we next document the level of persistence by group with respect to the overall distribution and show how each group's contribution to national-level persistence compares to its population share; and we close with absolute educational mobility as a complementary lens.

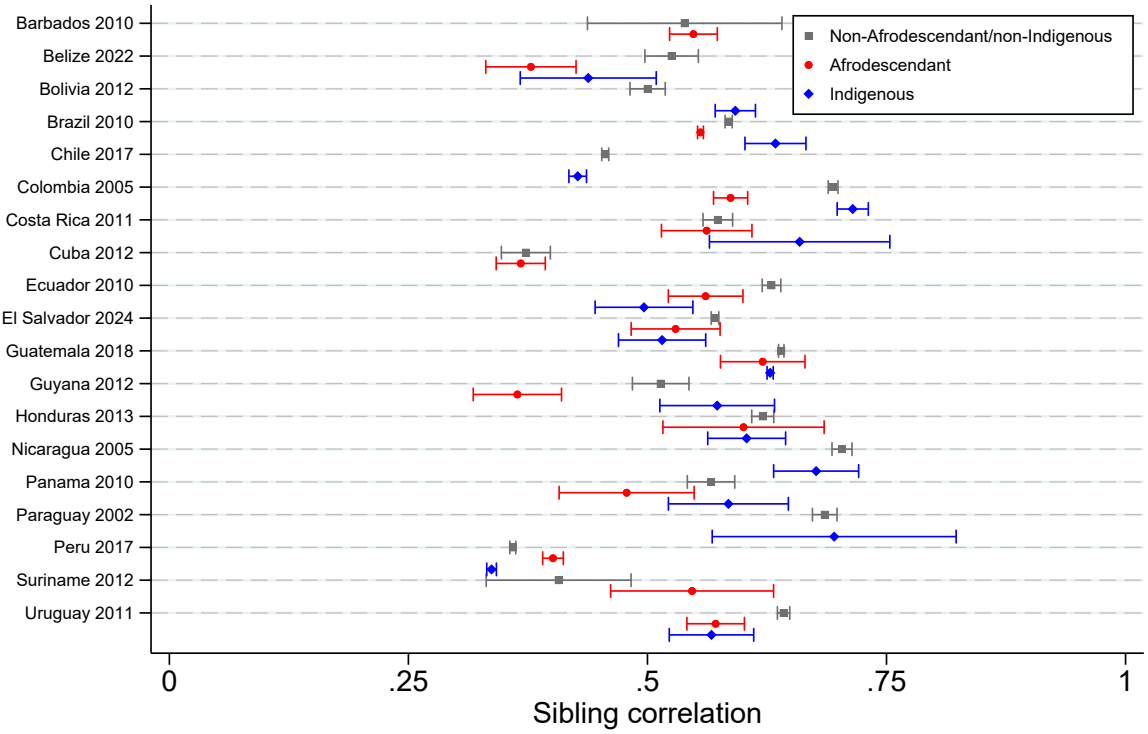
Within-group persistence across countries and groups. Figure 1 presents within-group sibling correlations for the three groups across all 19 countries. Two patterns stand out. First, sibling correlations are high throughout the region regardless of group, ranging from roughly 0.34 to 0.71, consistent with the strong role of family background documented in the broader Latin American literature (Muñoz & Jaque 2026). Second, group rankings vary meaningfully across countries rather than following a single regional pattern.

Indigenous peoples tend to exhibit the highest within-group sibling correlations (i.e., the

least mobility within their own distributions), including in countries where they constitute a substantial share of the population, such as Bolivia, Panama, and Paraguay. Afrodescendants, by contrast, display lower within-group correlations than the non-Afrodescendant/non-Indigenous group in most countries, most markedly in Guyana and Belize, suggesting comparatively greater family-level mobility once structural group differences are set aside. The group composed by non-Afrodescendants and non-Indigenous people typically falls between the two minority groups, though it is the most precisely estimated given its larger sample sizes in most countries.

A key limitation of within-group intra-class correlations (ICC), however, is that they measure persistence only relative to each group's own mean. A group whose average educational attainment lies far below the national mean will appear mobile within its own distribution even though its members face a compounded disadvantage: both a low starting point and the intergenerational transmission of that disadvantage. The decomposition in the following subsection addresses this directly.

Figure 1: Sibling correlations (circa 2010) by race and ethnicity (within group persistence)



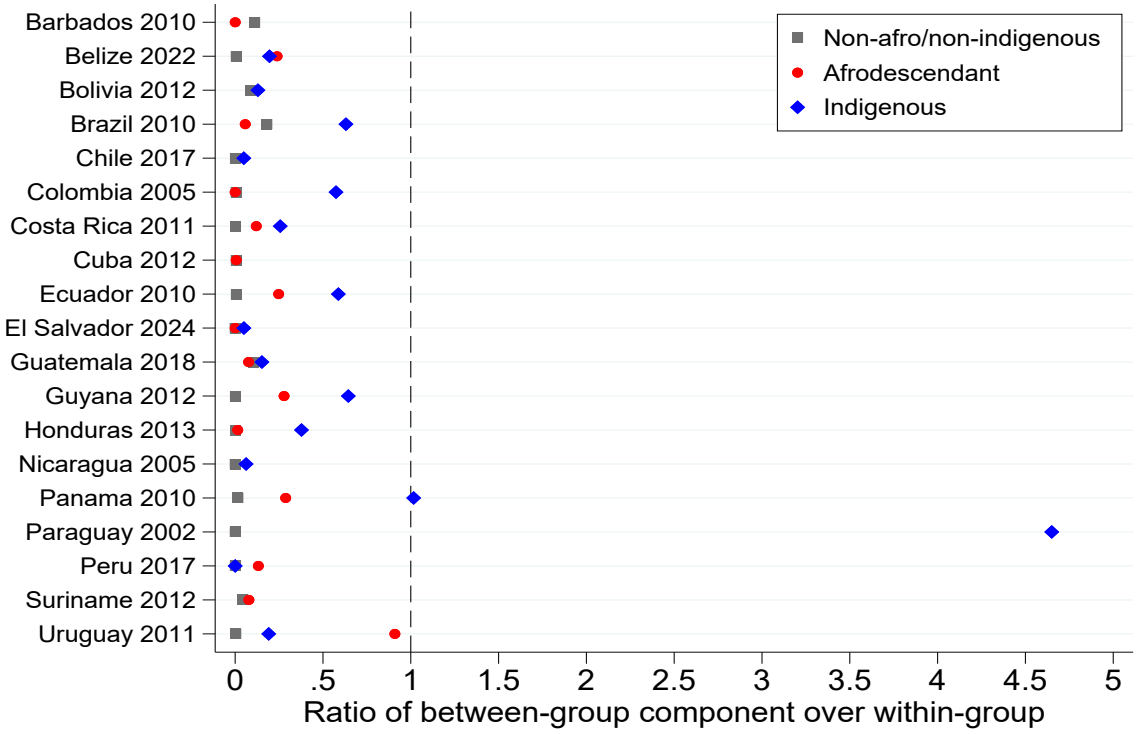
Note: The figure shows within-group sibling correlations in schooling by racial/ethnic group. Error bars are 95% confidence intervals. Samples that do not identify a given group (or the identified group contains less than 90 observations) are omitted (i.e., Non-Afrodescendant/non-Indigenous in Bolivia, Chile, Nicaragua, and Paraguay corresponds to Non-Indigenous and in Barbados, Cuba and Suriname to Non-Afrodescendants). For each country, it uses the sample closest to 2010 that allows identification by race and ethnicity.

The decomposition: structural position vs. within-group transmission. Figure 2 presents the A_g/B_g ratio for each country and group. Values below one indicate that within-group transmission dominates structural position; values above one indicate the reverse; the dashed line at one marks equality between the two components. The central finding is unambiguous: the ratio falls below one for almost every country-group combination in the sample. Within-group transmission of educational disadvantage — the component most

closely connected to the standard sibling correlation — is the primary engine of immobility for both Indigenous and Afrodescendant populations throughout the region. For Afrodescendants, the ratio is consistently low across in nearly all countries, in most cases below 0.3: their structural distance from the national schooling average contributes modestly to total persistence, and their immobility is overwhelmingly a within-group phenomenon. Cuba and Barbados, where Afrodescendant and non-Afrodescendant group means sit close together, yield ratios near zero.

For Indigenous peoples, the picture is more heterogeneous. B_g exceeds A_g in most countries, but the A_g/B_g ratio is systematically higher for Indigenous than for Afrodescendant groups, reflecting the greater structural distance of Indigenous populations from national schooling averages. Two countries depart clearly from the general pattern. In Paraguay — where the Indigenous group mean of roughly 3.6 years of schooling lies more than five years below the national average of 9.1 — the ratio far exceeds one ($A_g/B_g \approx 4.6$): structural position is the dominant driver of Indigenous immobility, with within-group betwen-family variance contributing comparatively little. Panama presents a similar configuration in the circa 2010 wave, where the structural position component exceeds within-group between-family variance for Indigenous peoples — a reversal that subsequently disappears as educational expansion narrowed the mean gap in later rounds. Brazil, Colombia, Ecuador and Guyana show elevated but sub-unity ratios, slightly above 0.5, indicating that structural position is substantial without being the dominant component. At the other end, Chile, Nicaragua, Peru, and El Salvador show very low Indigenous ratios, comparable to those of Afrodescendants, reflecting smaller gaps between group and national means.

Figure 2: Ratio of between-group component over within-group component (circa 2010)



Note: The figure shows the ratio of the between-group component (A_g) to the within-group between-family variance (B_g) for individuals classified as Afrodescendant (red circles), Indigenous people (blue diamonds) or Non-Afrodescendant/non-Indigenous (grey squares). Values below one indicate that within-family transmission dominates; values above one indicate that structural position dominates. The vertical dashed line marks equality. Samples that do not identify a given group (or the identified group contains less than 90 observations) are omitted (i.e., Non-Afrodescendant/non-Indigenous in Bolivia, Chile, Nicaragua, and Paraguay corresponds to Non-Indigenous and in Barbados, Cuba and Suriname to Non-Afrodescendants). For each country, it uses the sample closest to 2010 that allows identification by race and ethnicity.

Mobility by group and their contribution to overall persistence. Figure 3 presents log ratios of persistence relative to the non-Afrodescendant/non-Indigenous group, so that zero indicates parity, positive values indicate higher persistence than the reference group, and negative values indicate lower persistence. The left panel shows within-group

sibling correlations; the right panel shows persistence in the overall national distribution, $A_g + B_g$, which additionally incorporates the structural distance of each group's mean from the national average.

Three findings stand out. First, the left panel confirms that Afrodescendants have lower within-group persistence than the reference group in the majority of countries — they experience greater family-level mobility within their own distribution. Only Suriname and Peru show meaningfully higher within-group persistence for Afrodescendants. Indigenous peoples cluster closer to parity in the left panel, with within-group sibling correlations similar to or slightly below the reference group in most countries; Bolivia, Costa Rica, and Guyana are exceptions where Indigenous persistence exceeds markedly that of the reference group.

Second, the picture shifts substantially when moving to the right panel. For Indigenous peoples, $A_g + B_g$ exceeds the reference group's equivalent in nearly every country, often by a wide margin. Panama and Paraguay stand out, with log ratios near 1.2, corresponding to approximately 3.3 times the reference group's persistence in the overall distribution. Bolivia, Brazil, Guyana, Colombia, and Costa Rica also show large positive gaps. Only El Salvador and Peru show Indigenous $A_g + B_g$ clearly below parity. The contrast between the two panels for Indigenous peoples — near-zero gaps on the left, large positive gaps on the right — is the core empirical finding of the paper: within-group sibling correlations substantially understate Indigenous immobility by ignoring the structural component A_g.

Third, Afrodescendants in the right panel show a more heterogeneous pattern. In Belize, Colombia, Guyana, and Panama, Afrodescendants remain below parity even in A_g+B_g terms, meaning their higher within-group mobility more than offsets their structural disadvantage relative to the national mean. In Suriname, Peru, Uruguay, and Ecuador, adding A_g pushes Afrodescendant persistence above parity meaningfully. Brazil and Cuba show near-parity, consistent with the intermediate structural position of Afrodescendants in those countries.

Temporal trends. Figure 4 presents the log ratio of each group's persistence measure relative to the non-Afrodescendant/non-Indigenous group, plotted for every available census

Figure 3: Mobility in schooling for Afrodescendants and Indigenous peoples relative to the rest of the population (circa 2010)



(a) Persistence within group

(b) Persistence in the overall distribution

Notes: Each panel plots the log ratio of the persistence measure for Afrodescendants (red circles) and Indigenous peoples (blue diamonds) relative to the non-Afrodescendant/non-Indigenous group. Values above zero indicate higher persistence than the reference group. Left panel: within-group sibling correlations (ICC). Right panel: A_g+B_g, total persistence in the overall national distribution per the Karlson & In (2025) decomposition.

wave across the seven countries with multiple observations. Each point represents one census wave, with color ranging from light to dark blue as we move from older to more recent decades; grey lines connect consecutive waves within each country-group series. The left panel shows within-group sibling correlations; the right panel shows total group persistence in the overall national distribution, $A_g + B_g$.

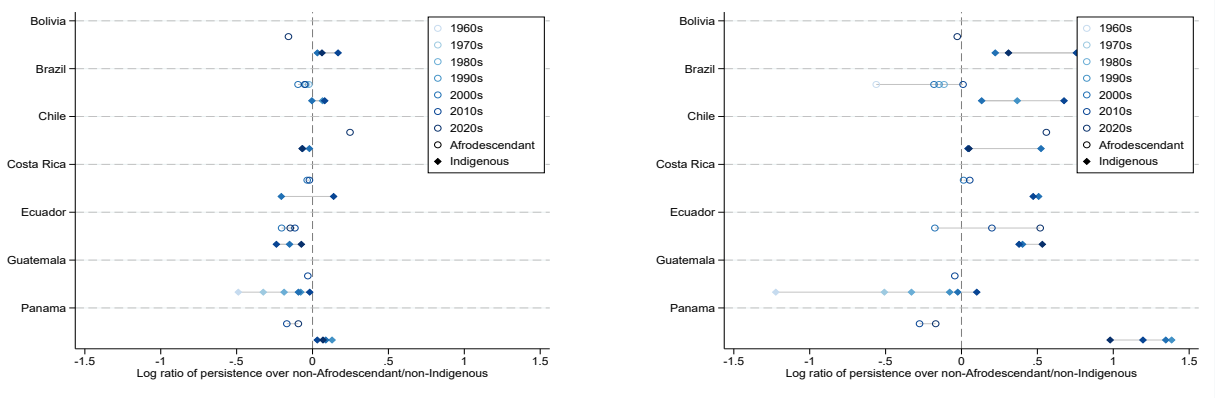
Two patterns stand out. First, within-group ICC log ratios cluster near zero and remain broadly stable across waves in most country-group combinations, indicating that relative within-group persistence has not changed systematically even as absolute ICCs declined with regional educational expansion (Muñoz & Jaque 2026). Afrodescendants sit at or slightly below zero in most countries and this position is largely unchanged across waves.

The salient exception is Guatemala's Indigenous population, where the log ratio moved from approximately -0.5 in 1964 to near zero by 2018. This convergence reflects divergent absolute trajectories: the Indigenous within-group sibling correlation rose from approximately 0.50 to 0.63 while the non-Indigenous correlation fell from 0.80 to 0.64 over the same period. The six available census waves reveal that this was a gradual, monotonic process

consistent with educational access for Indigenous peoples becoming progressively more dependent on family background as the school system expanded. In all other countries, log ratios remain tightly clustered near zero across all waves, confirming that group differences in within-family transmission are modest and stable over time.

The right panel shifts the lens to total group persistence in the overall national distribution, $A_g + B_g$. The range of log ratios is substantially wider — spanning from below -1 to above 1 — confirming that changes in A_g, the structural position component, drive most of the cross-group and cross-time variation. Several country-specific patterns emerge. Guatemala's Indigenous series shows the most dramatic trajectory: beginning at approximately -1.3 in 1964, when Indigenous group means sat far below the national average, and converging smoothly toward parity across six census waves as educational expansion progressively narrowed the structural position. Bolivia and Brazil display non-monotonic trajectories: Bolivia's Indigenous log ratio rises from 0.22 in 2001 to 0.72 in 2012 before falling to 0.31 in 2024, suggesting that the structural position widened during the 2000s but partially reversed by the most recent census. In Ecuador, Afrodescendant relative persistence has crossed parity entirely, reaching 0.53 log points above the reference group by 2022, while Indigenous persistence remains stably elevated at roughly 0.4 log points above the reference group. Panama's Indigenous population remains the most structurally disadvantaged: its log ratio has nevertheless declined steadily from 1.39 in 1990 to 0.98 in 2023 — implying approximately three times greater total persistence than the reference group — indicating a clear narrowing over the four available census waves.

Figure 4: Changes over time



(a) Persistence within group **(b)** Persistence in the overall distribution

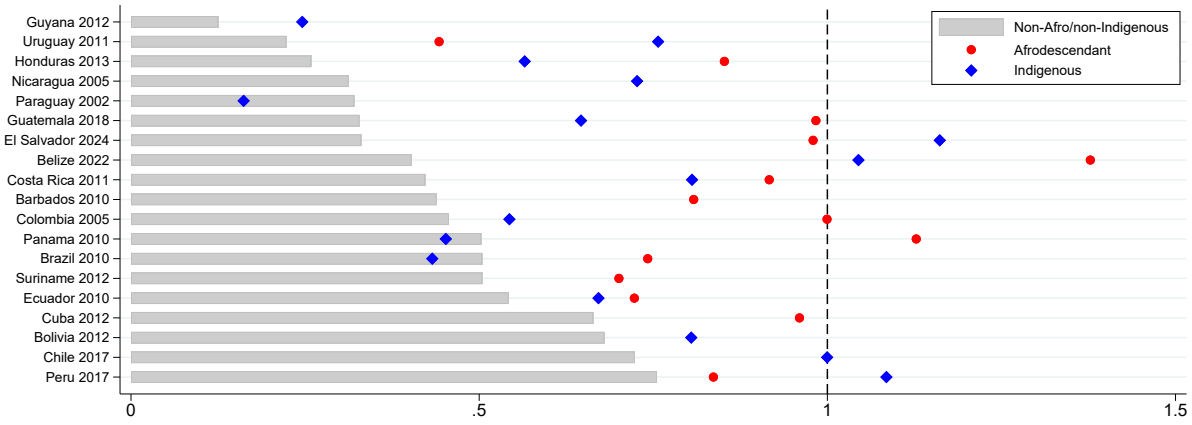
Notes: Each panel plots the log ratio of the persistence measure for Afrodescendants (open circles) and Indigenous peoples (filled diamonds) relative to the non-Afrodescendant/non-Indigenous group across all available census waves. Points are colored from light to dark blue corresponding to older to more recent census decades; grey lines connect consecutive waves within each country-group series. Values above zero indicate higher persistence than the reference group. Left panel: within-group sibling correlations (ICC). Right panel: $A_g + B_g$, persistence in the overall national distribution per the Karlson & In (2025) decomposition.

Absolute mobility in education. Figure 5 presents absolute upward mobility in secondary education — measured as the share of individuals who completed secondary schooling conditional on their parents not having done so — disaggregated by racial and ethnic group. Grey bars show the baseline probability for non-Afrodescendant/non-Indigenous individuals; red dots and blue diamonds show the ratio of Afrodescendant and Indigenous mobility to this baseline, with the dashed line at one indicating parity.

Three patterns emerge. First, absolute mobility for the non-Afrodescendant/non-Indigenous group varies widely across the region, from roughly 20 percent in Guyana to over 75 percent in Peru, reflecting large cross-country differences in educational expansion. Second, Afrodescendants are generally close to parity with the reference group, with most country ratios clustering near one. Belize is a clear exception, with Afrodescendant individuals showing

substantially higher absolute mobility than the non-Afrodescendant/non-Indigenous group. In Brazil, Ecuador, Uruguay, and Suriname, Afrodescendants face the largest disadvantage. Third, and most starkly, Indigenous peoples show the largest absolute mobility gaps. Ratios well below one are the norm: in Paraguay and Guyana, Indigenous individuals reach secondary education at roughly one-fifth and one-third the rate of the reference group, respectively. Exceptions exist — in Belize, Chile, El Salvador, and Peru, Indigenous mobility is at or above parity — though these cases often involve relatively small Indigenous population shares.

Figure 5: Upward mobility in secondary education (circa 2010)

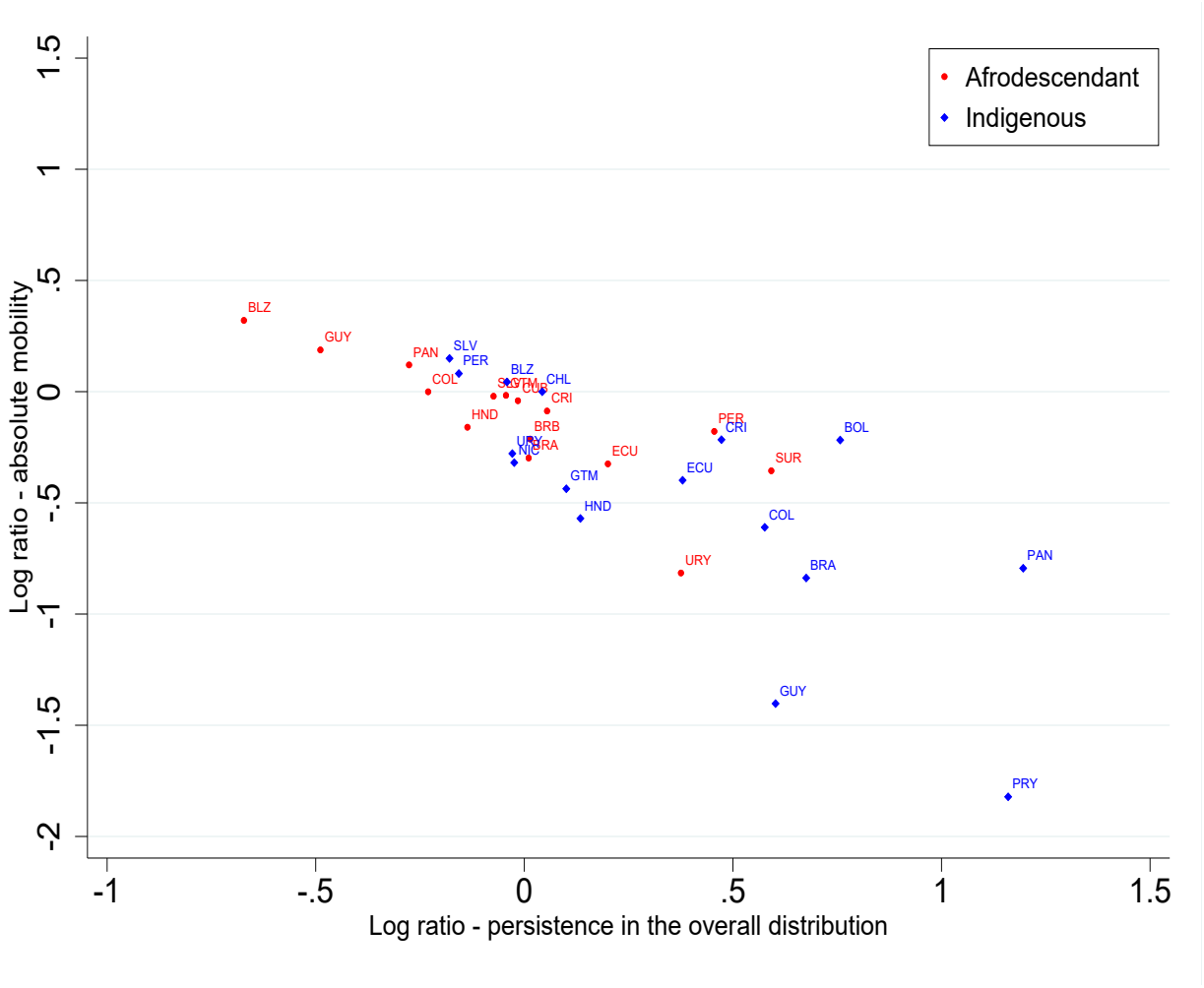


Note: Grey bars indicate the probability that individuals complete secondary education, conditional on their parents not having done so. Red (blue) markers denote the ratio of this probability for Afrodescendant (Indigenous) children relative to non-Afrodescendant/non-Indigenous individuals.

These absolute mobility patterns do not map straightforwardly onto the relative persistence findings from the preceding subsections. Figure 6 places absolute and relative mobility in a common frame. The horizontal axis measures the log ratio of relative persistence in the overall distribution so that points to the right indicate higher overall immobility relative to the reference group; the vertical axis measures the log of the ratio in absolute upward mobility, so that points above zero indicate higher absolute mobility than the reference group.

Three patterns stand out. First, Afrodescendant observations cluster near the origin or in the upper-left quadrant — lower relative persistence paired with near-parity or higher absolute mobility — confirming that Afrodescendants are rarely doubly disadvantaged relative to the reference group; Belize and Guyana are the clearest exceptions in their favor, while Uruguay sits in the lower-right quadrant with both higher relative persistence and lower absolute mobility. Second, Indigenous peoples are concentrated in the lower-right quadrant, where higher relative persistence and lower absolute mobility compound: Paraguay and Panama anchor the extreme, while El Salvador, Chile, and Belize are the main exceptions near parity on both dimensions. Third, the two dimensions are negatively correlated across the full sample — a pattern that is not mechanical but reflects the fact that A_g is largest precisely where group means are furthest from the national average, which is also where absolute mobility is lowest.

Figure 6: Upward mobility vs. relative mobility (circa 2010)



Note: Red (blue) markers denote the ratio of this mobility (or persistence) for Afrodescendant (Indigenous) children relative to non-Afrodescendant/non-Indigenous children. Absolute mobility is estimated as the probability that individuals complete secondary education, conditional on their parents not having done so.

V Concluding remarks

This paper asks whether standard within-group sibling correlations accurately characterize the intergenerational persistence faced by Indigenous and Afrodescendant populations in Latin America and the Caribbean. We show that they do not. Applying the decomposition

of Karlson & In (2025) to census data from 19 countries, we separate each group's persistence in the overall national distribution into two components: a structural position term (A_g), which captures the squared distance of the group's mean from the national average, and a within-group transmission term (B_g).

Our first main finding is that within-group sibling correlations are high throughout the region (ranging from roughly 0.34 to 0.71) and that group rankings vary considerably across countries without a single dominant pattern. Afrodescendants display lower within-group correlations than the non-Afrodescendant/non-Indigenous reference group in most countries, suggesting greater family-level mobility within their own distribution. Indigenous peoples cluster closer to parity, with within-group ICCs similar to or moderately above the reference group in most settings.

The picture changes substantially once structural position is accounted for. Because Indigenous group means lie persistently below the national average in most countries, the A_g component is large, and adding it to B_g places Indigenous peoples as the most persistently disadvantaged group in the overall distribution in nearly every country in our sample — despite showing comparable within-group ICCs. Panama and Paraguay are the most extreme cases, where Indigenous $A_g + B_g$ is approximately 3.3 times that of the reference group. For Afrodescendants the pattern is more heterogeneous: in several countries — including Belize, Guyana, Colombia, and Panama — higher within-group mobility more than offsets the structural position, so Afrodescendant persistence in the overall distribution remains below that of the reference group. In others, adding A_g brings Afrodescendant total persistence above parity. This heterogeneity partly reflects differences in the magnitude of group mean gaps, which in turn depend on history, geography, and the degree of ethnoracial stratification in each country.

In nearly all countries, B_g exceeds A_g for both minority groups, meaning that within-group transmission — not structural position alone — is the dominant engine of persistence. This has an important implication: even if policies succeed in closing group mean gaps

over time (thereby reducing A_g), the underlying within-family mechanisms that transmit disadvantage within Indigenous and Afrodescendant communities will remain intact unless they are addressed directly. At the same time, A_g is not negligible, and in a small number of country-period combinations — most notably Indigenous populations in Panama and Guatemala in earlier decades — it represents the majority of total group persistence. In those cases, structural interventions targeting the gap between group means and the national average are indispensable. The temporal analysis reveals heterogeneous trajectories. For within-group persistence, Guatemala stands out: the within-group sibling correlation for Indigenous peoples rose from 0.50 to 0.63 over the 1964–2018 period, as educational expansion increased rather than reduced the role of family background for those gaining access — a gradual, monotonic process visible across all six available census waves. For total persistence in the overall national distribution ($A_g + B_g$), the picture is more varied. Guatemala's structural position for Indigenous peoples narrowed substantially as group means converged toward the national average. In contrast, Bolivia and Brazil display non-monotonic trajectories in $A_g + B_g$ terms, with Bolivia's Indigenous log ratio rising from 0.22 in 2001 to 0.72 in 2012 before falling to 0.31 in 2024. Panama's Indigenous population remains persistently disadvantaged — its total persistence is approximately three times that of the reference group — but its log ratio has declined steadily from 1.39 in 1990 to 0.98 in 2023, indicating a meaningful reduction in the structural position over four census waves.

Our results also speak to the relationship between absolute and relative educational mobility. Absolute upward mobility, measured as the probability of completing secondary schooling when parents did not, is lower for Indigenous peoples in most countries, and the two dimensions of disadvantage compound: countries where Indigenous peoples face the greatest relative persistence also tend to display the largest absolute deficits. For Afrodescendants, the two dimensions are more often decoupled, with many countries showing near-parity in absolute mobility alongside lower relative persistence in the overall distribution. The divergence between absolute and relative measures suggests that progress on one dimension

does not guarantee progress on the other, and comprehensive assessments of ethnoracial inequality require both lenses.

Three limitations deserve acknowledgment. First, our estimates are descriptive: the sibling correlation captures the combined influence of all shared family and community factors, but does not identify which specific channels (e.g., school quality, labor market discrimination, neighborhood segregation, parental networks) drive the group differences we document. Second, our cross-sectional identification of siblings from co-resident households introduces a small upward bias in the ICC, estimated at 4.3 percent on average by Ahsan et al. (2025), which is unlikely to alter qualitative comparisons across groups. Third, racial and ethnic self-identification is measured heterogeneously across countries and over time, which limits strict comparability at the margins, particularly for groups that represent a small share of sibling pairs. Future research could deepen these findings by examining how country-level characteristics — inequality, public investment in education, anti-discrimination policies — predict the degree to which Indigenous and Afrodescendant families contribute disproportionately to national immobility, and by extending the decomposition to income outcomes as longitudinal administrative data become available across the region.

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Appendices

Identification of siblings

The microdata from each sample are organized at the household level, which allows us to identify individuals residing in the same household at the time of the interview. This identification relies on variables describing each member's relationship to the household head. In the case of IPUMS data, we use `pernum_pop`, `pernum_mom`, and related variables. For the remaining datasets, we rely on variables indicating the relationship to the household head.

For IPUMS censuses, we use `pernum_pop` and `pernum_mom`, which are constructed by IPUMS (Sobek and Kennedy, 2009) to identify the probable father and mother of each household member. For instance, individuals classified as children of the household head are assigned the head as their probable father or mother, depending on the head's sex. All household members sharing the same probable father are classified as siblings. When information on the father is missing, individuals sharing the same probable mother are instead classified as siblings.

Second, for individuals with missing parental information (i.e., missing values for `pernum_pop` and `pernum_mom`), and for all non-IPUMS datasets[10], we construct sibling groups using the `related` variable (or its equivalent), which captures the individual's relationship to the household head. Specifically:

- All children of the household head within the same household are grouped as siblings.
- The household head and individuals classified as their siblings or stepsiblings are grouped together.
- The spouse or partner of the household head, along with individuals classified as their

[10] Except for the 2010 Barbados sample, for which information on the position of both father and mother is also available.

siblings or stepsiblings, are also grouped together.

Variable description

Age. This variable reports the respondent's age in years at the time of the interview, except for Colombia 2018, where age is reported in 5-year bins (0-4, 5-9, ..., 95-99, 100+). Since we only use individuals between 21 and 30 years old, we keep only the relevant intervals. For Colombia, this means retaining only the 20–24 and 25–29 age groups, as they cover the full 21–30 age range.

Ethnicity and race. Ethnicity is a multidimensional concept that can be captured through a variety of approaches, including ethnic ancestry or origin, ethnic identity, cultural background, nationality, race, skin color, minority status, language, religion, or combinations of these dimensions. Across countries, individuals are asked to self-identify, with question wording that typically reflects one or more of these concepts.

Two main formats are used to elicit this information. In some cases, respondents are asked a binary (yes/no) question about whether they belong to a particular group. In others, they are asked to self-identify from a predefined set of categories, which varies across countries. An exception is given by the 2012 and 2024 waves for Bolivia, where respondents are allowed to provide an open-ended answer. To ensure comparability, responses are harmonized into three categories: Afrodescendant", Indigenous", and "Non-afro/non-indigenous".

An important limitation should be noted. It is not always possible to map all country-specific responses into these three categories. In some cases, surveys do not include all groups as response options, or the wording of the question is not designed to identify all relevant groups. As a result, not all categories are observed in every country, as shown in Table A1.

All information on ethnicity and race described above is summarized in Table A2, which reports all samples used, the corresponding census question in each case, the set of available response categories, and the harmonization applied to construct our classification.

As noted above, the analysis is conducted at the level of sibling pairs. If both siblings are

classified as Indigenous or Afrodescendant, the corresponding category is assigned to the pair. If one sibling is Afrodescendant (Indigenous) and the other is classified as "Non-afro/non-indigenous", the pair is assigned to the Afrodescendant (Indigenous) category. Finally, if one sibling is Indigenous and the other Afrodescendant, the pair is assigned to the group with the smaller representation in the sample.

Educational attainment. This variable is measured using two indicators. The first is years of schooling, constructed from the highest grade completed and the duration of each educational level within a country's system. When this measure is not available, we rely on a second indicator: the highest level of education completed, categorized into four groups: "no education/incomplete primary," "primary education," "secondary education," and "tertiary education." The availability of each indicator by country-wave is detailed in Table A1.

For samples with years of schooling, the variable is top-coded at 15 years. For samples reporting educational attainment in categories, we recode these into years using median values observed in IPUMS samples: 2 years for no education or incomplete primary, 8 years for completed primary, 12 years for completed secondary, and 15 years for completed tertiary education. Except for Colombia 2018 and Uruguay 2023, for which more detailed educational categories are available, we use category-specific imputations to assign years of schooling.

Tables and Figures

Table A1: Country availability

Country	Waves	Source	Education	Ethnicity and race categories
Barbados	2010	Census	Years of schooling	Afrodescendant, Non-Afro/non-Indigenous
Belize	2022	Census	Educational level	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Bolivia	2001	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Bolivia	2012	Census	Years of schooling	Afrodescendant, Indigenous
Bolivia	2024	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Brazil	1960	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Brazil	1980	IPUMS	Years of schooling	Afrodescendant, Non-Afro/non-Indigenous
Brazil	1991	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Brazil	2000	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Brazil	2010	IPUMS	Educational level	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Chile	2002	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Chile	2017	Census	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Chile	2024	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Colombia	2005	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Colombia	2018	Census	Educational level	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Costa Rica	2000	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Costa Rica	2011	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Cuba	2002	IPUMS	Educational level	Afrodescendant, Non-Afro/non-Indigenous
Cuba	2012	IPUMS	Years of schooling	Afrodescendant, Non-Afro/non-Indigenous
Ecuador	2001	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Ecuador	2010	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Ecuador	2022	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
El Salvador	2007	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
El Salvador	2024	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Guatemala	1964	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Guatemala	1973	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Guatemala	1981	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Guatemala	1994	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous

Country	Waves	Source	Education	Ethnicity and race categories
Guatemala	2002	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Guatemala	2018	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Guyana	2012	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Honduras	2013	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Nicaragua	2005	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Panama	1990	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Panama	2000	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Panama	2010	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Panama	2023	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Paraguay	2002	IPUMS	Years of schooling	Indigenous, Non-Afro/non-Indigenous
Peru	2017	Census	Educational level	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Suriname	2012	Census	Educational level	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Uruguay	2006	IPUMS	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Uruguay	2011	Census	Years of schooling	Afrodescendant, Indigenous, Non-Afro/non-Indigenous
Uruguay	2023	Census	Educational level	Afrodescendant, Indigenous, Non-Afro/non-Indigenous

Table A2: Ethnicity Question

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Barbados	2010	What is your ethnic origin?	**Not available**	Black	White, Oriental, East Indian, Middle Eastern, Mixed, Other
Belize	2022	Which ethnic group do you/ does N identify with the most?	Maya Ketchi, Garífuna	Creole, African descent	Mestizo/Hispanic/Latino, Mennonite, Maya Mopan, East Indian, Chinese, Taiwanese, Caucasian/White, Maya Yucatec, Indian, Lebanese, Other

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Bolivia	2001	Do you consider yourself part of any of the following Native or Indigenous people?	Quechua, Aymara, Guaraní, Chiquitano, Mojeño, Other	**Question is not aimed to identify this group**	None
Bolivia	2012	As a bolivian, do you belong to any Indigenous, Native, Peasant or Afrobolivian nation or people? Which one?	**Open answer**	**Open answer**	**Open answer**

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Bolivia	2024	Do you self-identify with any Indigenous, Native, Peasant, or Afro-Bolivian nation or people? Which one?	**Open answer**	**Open answer**	**Open answer**
Brazil	1960	Color	Indigenous	Brown, Black	White, Asian
Brazil	1980	Color	Not available	Brown, Black	White, Asian
Brazil	1991	Race or color	Indigenous	Brown, Black	White, Asian
Brazil	2000	Your color or race is...	Indigenous	Brown, Black	White, Asian
Brazil	2010	Your color or race is...	Indigenous	Brown, Black	White, Asian

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Chile	2002	Do you belong to any of the following Native or Indigenous people?	Alacalufe (Kawashkar), Atacameño, Aimara, Colla, Mapuche, Quechua, Rapa Nui, Yámana (Yagán)	**Question is not aimed to identify this group**	None
Chile	2017	Do you consider yourself to belong to any Indigenous or Native people?	Yes	**Question is not aimed to identify this group**	No

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Chile	2024	Are you or do you consider yourself part of any Indigenous or Native people?	Yes	**Question is not aimed to identify this group**	**This group is identified with the help of the "No" answer to this and the next question**
Chile	2024	According to your ascendants, customs or culture, are you or do you consider yourself...?	**Question is not aimed to identify this group**	Afrodescendant, Afrochilean, Black, from the Tribal People chilean afrodescendant, Azapa brown, Chimba black	**This group is identified with the help of the "No" answer to this and the before question**

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Colombia	2005	According to your culture, people, or physical traits, you are or are recognized as...	Indigenous	Raizal of the archipelago of San Andrés and Santa Catalina; Palenquero de San Basilio; Black, mulatto, Afrocolombian, Afrodescendant	None

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Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Colombia	2018	According to your culture, people, or physical traits, you are or are recognized as...	Indigenous	Raizal of the archipelago of San Andrés, Providencia and Santa Catalina; Palenquero de San Basilio; Black, mulatto, Afrodescendant, AfroColombian	Gitano o rom; No ethnic group
Costa Rica	2000	Do you belong to the culture...?	Indigenous	Afrocostarrican or black	Chinese, None

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Costa Rica	2011	Does (...) consider themselves ...?	Yes	**Question is not aimed to identify this group**	**This group is identified with the help of the "No" answer to this and the next question**
Costa Rica	2011	Does (...) consider themselves ...?	**Question is not aimed to identify this group**	Black or afrodescendant, Mulatto, Chinese,	**This group is identified with the help of the answers "White or mestizo", "Other" and "None" to this and the before question**

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Cuba	2002	What is your skin color?	**Not available**	Black	White, Mestizo/Mulatto
Cuba	2012	What is your skin color?	**Not available**	Black	White, Mestizo/Mulatto
Ecuador	2001	How are they considered?	Indigenous	Black, Afroecuatorian, Mulatto	White, Mestizo, Other
Ecuador	2010	How does (...) identify according to their culture and customs?	Indigenous	Black, Mulatto, Afroecuatorian/Afrodescendant	White, Mestizo, Montubio, Other
Ecuador	2022	How does (...) identify according to their culture and customs?	Indigenous	Black, Mulatto, Afroecuatorian/Afrodescendant	White, Mestizo, Montubio, Other

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Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
El Salvador	2007	Are you...?	Indigenous	Black	White, Mestizo, Other
El Salvador	2024	According to your customs, ancestors and traditions, does (...) identify with any Indigenous people?	Yes	**Question is not aimed to identify this group**	**This group is identified with the help of the "No" answer to this and the next question**
El Salvador	2024	According to your customs and personal history, does (...) identify as afrodescendant or have black or african ancestry?	**Question is not aimed to identify this group**	Yes	**This group is identified with the help of the "No" answer to this and the before question**

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Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Guatemala	1964	Ethnic group	Indigenous	**Question is not aimed to identify this group**	Non-Indigenous
Guatemala	1973	Are you indigenous?	Yes	**Question is not aimed to identify this group**	No
Guatemala	1981	Are you indigenous?	Yes	**Question is not aimed to identify this group**	No
Guatemala	1994	Are you indigenous?	Yes	**Question is not aimed to identify this group**	No

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Guatemala	2002	Are you indigenous?	Yes	**Question is not aimed to identify this group**	No
Guatemala	2018	Based on your background or history, how do you consider or self-identify:	Maya, Garífuna, Xinka	Afrodescendant, Creole, Afromestizo	Ladin(s), Foreigner
Guyana	2012	To which ethnic group do you/does (...) belong?	Amerindian	African/Black	East Indian, Chinese, Mixed, Portuguese, White, Other
Honduras	2013	How does (...) self-identify?	Indigenous	Afrohonduran, Black	Mestizo, White, Other

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Nicaragua	2005	Does (...) consider themselves to belong to any Indigenous people or ethnic group	Yes	**Question is not aimed to identify this group**	No
Panama	1990	To which Indigenous group do you belong to?	Kuna, Guaymi, Téribe, Bokota, Emberá, Waunana	**Question is not aimed to identify this group**	None
Panama	2000	To which Indigenous group do you belong to?	Kuna, Ngäbe, Buglé, Téribe, Bokota, Emberá, Waunana, Bri bri	**Question is not aimed to identify this group**	None

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Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Panama	2010	To which Indigenous group do you belong to?	Kuna, Ngäbe, Buglé, Naso/Teribe, Bokota, Emberá, Wounaan, Bri bri	**Question is not aimed to identify this group**	**This group is identified with the help of the answer "None" to this and the next question**
Panama	2010	Do you consider yourself...?	**Question is not aimed to identify this group**	Colonial black, Antillano black, Black	**This group is identified with the help of the answer "None" to this and the before question**

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Table A2 – continued from previous page

Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Panama	2023	Based on your customs, traditions and ancestors, do you consider yourself Indigenous?	Kuna, Ngäbe, Buglé, Naso, Teribe, Bokota, Emberá, Wounaan, Bri bri, Other Indigenous group	**Question is not aimed to identify this group**	**This group is identified with the help of the answer "None" to this and the next question**
Panama	2023	Based on your customs, traditions and ancestors, do you consider yourself...?	**Question is not aimed to identify this group**	Afrodescedant, Afropanamanian, Brown, Black, Afrocolonial, Afroantillan, Other afrodescendant group	**This group is identified with the help of the answer "None" to this and the before question**

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Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Paraguay	2002	Is there anyone in this household who identifies as Indigenous or as belonging to an Indigenous ethnic group?	Yes, **the name and ethnic group of the person is then written down**	**Question is not aimed to identify this group**	No
Peru	2017	Based on your customs and ancestors, do you consider yourself...?	Quechua, Aimara, Native or Indigenous from Amazonia, part of another Indigenous nation or people	Black, brown, zambo, mulatto, afroperuvian or afrodescendant	White, Mestizo, Other
Suriname	2012	Which ethnic group does this person identify with?	Indigenous / Amerindian	Maroon /Bush Creole, Creole, Afrosurinamise	Indosurinamese, Javanese, Chinese, White, Mixed, Other

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Country	Year	Race and/or Ethnicity question	Indigenous categories	Afrodescendant categories	Other
Uruguay	2006	Do you believe you have ancestry from...?	Indigenous	Afro or black	Asian, White, Other
Uruguay	2011	Do you believe you have ancestry from...?	Indigenous	Afro or black	White, Asian, Other
Uruguay	2023	Do you believe you have ancestry from...?	Indigenous	Afro or black	White, Asian, Other

Table A3: Sibling shares by group

Sample	Afrodesc.	Indig.	Non-Afro/non-Indig.	Obs.	Sib. groups	Sib. mixes
Barbados 2010	93.41	-	6.59	7,122	3,204	0.00
Belize 2022	28.17	11.41	60.41	9,708	4,342	0.16
Bolivia 2001	-	50.58	49.42	18,513	8,151	0.00
Bolivia 2012	0.20	33.48	66.32	22,612	10,143	0.00
Bolivia 2024	0.19	32.99	66.83	422,282	191,262	0.04
Brazil 1960	34.96	0.01	65.03	378,179	154,995	0.00
Brazil 1980	41.07	-	58.93	784,794	332,498	0.00
Brazil 1991	49.47	0.12	50.42	634,915	268,505	0.02
Brazil 2000	49.37	0.30	50.33	693,224	303,319	0.08
Brazil 2010	55.81	0.42	43.77	695,970	311,676	0.03
Chile 2002	-	4.88	95.12	45,447	21,004	0.00
Chile 2017	-	12.59	87.41	449,991	213,380	0.00
Chile 2024	0.77	12.29	86.95	465,952	221,512	0.10
Colombia 2005	10.40	7.45	82.15	108,686	47,957	0.02
Colombia 2018	7.38	5.24	87.38	1,902,093	890,105	0.05
Costa Rica 2000	1.55	1.13	97.32	10,605	4,729	0.00
Costa Rica 2011	7.53	1.53	90.94	18,119	8,198	0.04
Cuba 2002	47.78	-	52.22	19,839	9,401	0.00
Cuba 2012	45.82	-	54.18	17,964	8,704	0.00
Ecuador 2001	4.23	3.65	92.12	29,419	12,955	0.07
Ecuador 2010	5.90	4.87	89.23	37,235	16,802	0.00
Ecuador 2022	4.15	6.99	88.86	645,965	298,008	0.15
El Salvador 2007	0.12	0.20	99.69	20,327	9,092	0.00
El Salvador 2024	0.47	0.79	98.73	247,756	113,759	0.01

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Table A3 – continued from previous page

Guatemala 1964	-	39.61	60.39	3,249	1,446	0.00
Guatemala 1973	-	32.70	67.30	4,388	1,955	0.00
Guatemala 1981	-	31.67	68.33	5,618	2,474	0.00
Guatemala 1994	-	33.51	66.49	17,562	7,683	0.00
Guatemala 2002	-	35.59	64.41	34,012	14,830	0.00
Guatemala 2018	0.19	45.14	54.67	712,295	305,640	0.03
Guyana 2012	31.35	11.26	57.39	9,361	4,222	0.12
Honduras 2013	1.52	7.85	90.63	27,582	12,100	0.10
Nicaragua 2005	-	5.73	94.27	22,158	9,540	0.00
Panama 1990	-	5.10	94.90	8,876	3,679	0.00
Panama 2000	-	7.83	92.17	8,644	3,812	0.00
Panama 2010	10.03	11.23	78.74	8,316	3,761	0.08
Panama 2023	27.64	20.12	52.25	133,038	60,841	0.80
Paraguay 2002	-	0.90	99.10	15,009	6,605	0.00
Peru 2017	3.38	23.40	73.22	963,241	444,311	0.28
Suriname 2012	36.30	2.52	61.18	1,664	745	0.00
Uruguay 2006	1.71	0.27	98.02	5,569	2,594	0.00
Uruguay 2011	4.59	2.08	93.33	74,920	34,588	0.09
Uruguay 2023	17.90	7.26	74.84	4,448	2,139	1.05

Table A4: Summary Statistics of schooling variable

	N	Min	Max	Median	Media	SD
Barbados 2010	Years of schooling	0	15	14	12.81	2.08
Belize 2022	Educational level	2	15	12	10.55	3.57
Bolivia 2001	Years of schooling	0	15	12	11.30	3.89
Bolivia 2012	Years of schooling	0	15	12	12.01	3.31
Bolivia 2024	Years of schooling	0	15	13	12.81	2.62
Brazil 1960	Years of schooling	0	15	2	2.75	3.03
Brazil 1980	Years of schooling	0	15	5	6.20	4.33
Brazil 1991	Years of schooling	0	15	6	6.64	4.21
Brazil 2000	Years of schooling	0	15	8	7.71	4.15
Brazil 2010	Educational level	2	15	12	9.39	4.09
Chile 2002	Years of schooling	0	15	12	11.56	3.20
Chile 2017	Years of schooling	0	15	13	12.87	2.62
Chile 2024	Years of schooling	0	15	14	13.33	2.30
Colombia 2005	Years of schooling	0	15	11	8.60	4.36
Colombia 2018	Educational level	0	15	11	11.41	3.09
Costa Rica 2000	Years of schooling	0	15	9	9.23	4.11
Costa Rica 2011	Years of schooling	0	15	11	10.39	3.72
Cuba 2002	Educational level	2	15	12	10.38	2.57
Cuba 2012	Years of schooling	0	15	12	12.28	2.41
Ecuador 2001	Years of schooling	0	15	11	9.70	4.40
Ecuador 2010	Years of schooling	0	15	12	11.30	3.89
Ecuador 2022	Years of schooling	0	15	13	13.32	2.38
El Salvador 2007	Years of schooling	0	15	9	8.94	4.66
El Salvador 2024	Years of schooling	0	15	11	10.83	3.38

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Table A4 – continued from previous page

Sample	Type	Min	Max	Median	Media	SD
Guatemala 1964	Years of schooling	0	15	0	2.24	3.25
Guatemala 1973	Years of schooling	0	15	3	3.97	4.22
Guatemala 1981	Years of schooling	0	15	4	4.96	4.63
Guatemala 1994	Years of schooling	0	15	6	6.21	4.76
Guatemala 2002	Years of schooling	0	15	6	7.03	4.88
Guatemala 2018	Years of schooling	0	15	9	8.62	4.27
Guyana 2012	Years of schooling	0	15	11	10.15	2.77
Honduras 2013	Years of schooling	0	15	8	8.16	4.45
Nicaragua 2005	Years of schooling	0	15	8	7.90	4.73
Panama 1990	Years of schooling	0	15	11	9.85	3.84
Panama 2000	Years of schooling	0	15	12	10.36	4.04
Panama 2010	Years of schooling	0	15	12	10.92	3.82
Panama 2023	Years of schooling	0	15	12	11.76	3.25
Paraguay 2002	Years of schooling	0	15	9	9.05	4.15
Peru 2017	Educational level	2	15	12	12.40	2.50
Suriname 2012	Educational level	2	15	8	9.86	2.65
Uruguay 2006	Years of schooling	0	15	10	10.06	3.41
Uruguay 2011	Years of schooling	0	15	11	10.78	3.48
Uruguay 2023	Educational level	0	15	12	12.38	2.93

Table A5: Sibling correlations decomposition

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Barbados 2010	ICC	0.55	0.55	.	0.54
	ICC_{se}	0.01	0.01	.	0.05
	$\bar{Y}$	12.85	12.82	.	13.33
	π_g	.	0.94	.	0.06
	A_g	.	0.00	.	0.23
	B_g	.	2.38	.	2.11
	$A_g + B_g$	.	2.38	.	2.34
	$\pi_g(A_g + B_g)$	.	2.24	.	0.14
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.52	.	0.03
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.94	.	0.06
	$V(Y_g)$	.	4.33	.	3.91
	N	6,408	6,034	.	374
Belize 2022	ICC	0.50	0.38	0.44	0.53
	ICC_{se}	0.01	0.02	0.04	0.01
	$\bar{Y}$	10.58	11.44	9.50	10.37
	π_g	.	0.29	0.11	0.59
	A_g	.	0.74	1.17	0.05
	B_g	.	3.09	6.00	7.44
	$A_g + B_g$	.	3.82	7.18	7.48
	$\pi_g(A_g + B_g)$	.	1.12	0.82	4.44
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.09	0.06	0.35
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.17	0.13	0.70
	$V(Y_g)$	.	8.16	13.71	14.16
	N	8,678	2,532	992	5,154

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Bolivia 2001	ICC	0.71	.	0.71	0.69
	ICC_{se}	0.01	.	0.01	0.01
	$\bar{Y}$	11.26	.	10.92	11.70
	π_g	.	.	0.56	0.44
	A_g	.	.	0.12	0.19
	B_g	.	.	11.83	9.37
	$A_g + B_g$	.	.	11.95	9.56
	$\pi_g(A_g + B_g)$	.	.	6.68	4.21
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.43	0.27
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.61	0.39
	$V(Y_g)$	.	.	16.60	13.58
	N	16,298	.	9,118	7,180
Bolivia 2012	ICC	0.57	.	0.59	0.50
	ICC_{se}	0.01	.	0.01	0.01
	$\bar{Y}$	12.02	.	10.98	12.63
	π_g	.	.	0.37	0.63
	A_g	.	.	1.09	0.36
	B_g	.	.	8.37	4.08
	$A_g + B_g$	.	.	9.46	4.44
	$\pi_g(A_g + B_g)$	.	.	3.46	2.82
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.32	0.26
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.55	0.45
	$V(Y_g)$	.	.	14.15	8.15
	N	20,022	.	7,316	12,706

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Bolivia 2024	ICC	0.51	0.41	0.52	0.49
	ICC_{se}	0.00	0.04	0.00	0.00
	$\bar{Y}$	12.82	12.53	12.40	13.09
	π_g	.	0.00	0.38	0.62
	A_g	.	0.09	0.18	0.07
	B_g	.	2.88	3.98	2.99
	$A_g + B_g$	.	2.97	4.16	3.05
	$\pi_g(A_g + B_g)$	.	0.01	1.57	1.90
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.00	0.23	0.28
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.00	0.45	0.55
	$V(Y_g)$	.	6.95	7.69	6.14
	N	381,752	1,008	143,580	237,164
Brazil 1960	ICC	0.78	0.74	.	0.77
	ICC_{se}	0.00	0.00	.	0.00
	$\bar{Y}$	2.80	1.53	.	3.50
	π_g	.	0.36	.	0.64
	A_g	.	1.61	.	0.50
	B_g	.	3.32	.	8.15
	$A_g + B_g$	.	4.93	.	8.65
	$\pi_g(A_g + B_g)$	.	1.76	.	5.56
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.19	.	0.60
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.24	.	0.76
	$V(Y_g)$	.	4.50	.	10.63
	N	309,932	110,632	.	199,300

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Brazil 1980	ICC	0.73	0.70	.	0.72
	ICC_{se}	0.00	0.00	.	0.00
	$\bar{Y}$	6.21	4.82	.	7.29
	π_g	.	0.44	.	0.56
	A_g	.	1.93	.	1.16
	B_g	.	11.01	.	13.36
	$A_g + B_g$	.	12.94	.	14.52
	$\pi_g(A_g + B_g)$	.	5.65	.	8.18
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.30	.	0.43
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.41	.	0.59
	$V(Y_g)$	.	15.74	.	18.64
	N	664,996	290,190	.	374,806
Brazil 1991	ICC	0.70	0.66	0.74	0.69
	ICC_{se}	0.00	0.00	0.02	0.00
	$\bar{Y}$	6.69	5.68	3.74	7.83
	π_g	.	0.53	0.00	0.47
	A_g	.	1.02	8.68	1.31
	B_g	.	10.59	10.76	12.15
	$A_g + B_g$	.	11.61	19.44	13.46
	$\pi_g(A_g + B_g)$	.	6.14	0.03	6.32
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.34	0.00	0.35
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.49	0.00	0.51
	$V(Y_g)$	.	16.04	14.56	17.57
	N	537,010	284,164	698	252,148

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Brazil 2000	ICC	0.66	0.60	0.66	0.66
	ICC_{se}	0.00	0.00	0.02	0.00
	$\bar{Y}$	7.80	6.73	5.96	9.12
	π_g	.	0.55	0.00	0.45
	A_g	.	1.13	3.36	1.76
	B_g	.	9.35	10.98	10.80
	$A_g + B_g$	.	10.48	14.35	12.56
	$\pi_g(A_g + B_g)$	.	5.76	0.05	5.60
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.33	0.00	0.32
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.50	0.00	0.49
	$V(Y_g)$	.	15.51	16.62	16.29
	N	606,638	333,720	2,228	270,690
Brazil 2010	ICC	0.59	0.56	0.63	0.58
	ICC_{se}	0.00	0.00	0.02	0.00
	$\bar{Y}$	9.48	8.76	6.78	10.70
	π_g	.	0.62	0.00	0.38
	A_g	.	0.53	7.32	1.47
	B_g	.	9.20	11.61	8.16
	$A_g + B_g$	.	9.73	18.93	9.63
	$\pi_g(A_g + B_g)$	.	6.00	0.08	3.65
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.36	0.00	0.22
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.62	0.01	0.38
	$V(Y_g)$	.	16.57	18.31	13.95
	N	623,352	384,320	2,704	236,328

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Chile 2002	ICC	0.58	.	0.56	0.58
	ICC_{se}	0.00	.	0.02	0.00
	$\bar{Y}$	11.60	.	10.11	11.68
	π_g	.	.	0.05	0.95
	A_g	.	.	2.22	0.01
	B_g	.	.	7.35	5.66
	$A_g + B_g$	.	.	9.57	5.67
	$\pi_g(A_g + B_g)$	.	.	0.49	5.38
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.05	0.53
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.08	0.92
	$V(Y_g)$	.	.	13.04	9.84
	N	42,008	.	2,148	39,860
Chile 2017	ICC	0.45	.	0.43	0.46
	ICC_{se}	0.00	.	0.00	0.00
	$\bar{Y}$	12.88	.	12.49	12.94
	π_g	.	.	0.14	0.86
	A_g	.	.	0.15	0.00
	B_g	.	.	3.05	3.07
	$A_g + B_g$	.	.	3.21	3.07
	$\pi_g(A_g + B_g)$	.	.	0.46	2.63
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.07	0.39
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.15	0.85
	$V(Y_g)$	.	.	7.15	6.73
	N	426,678	.	60,736	365,942

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Chile 2024	ICC	0.37	0.48	0.35	0.37
	ICC_{se}	0.00	0.02	0.01	0.00
	$\bar{Y}$	13.34	12.73	13.04	13.39
	π_g	.	0.01	0.13	0.86
	A_g	.	0.37	0.09	0.00
	B_g	.	3.02	1.95	1.94
	$A_g + B_g$	.	3.39	2.04	1.94
	$\pi_g(A_g + B_g)$	.	0.03	0.27	1.67
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.01	0.05	0.32
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.02	0.14	0.85
	$V(Y_g)$	.	6.32	5.58	5.18
	N	442,932	4,354	58,358	380,220
Colombia 2005	ICC	0.70	0.59	0.71	0.69
	ICC_{se}	0.00	0.01	0.01	0.00
	$\bar{Y}$	8.67	8.62	5.80	8.93
	π_g	.	0.11	0.07	0.82
	A_g	.	0.00	8.25	0.07
	B_g	.	10.09	14.36	12.64
	$A_g + B_g$	.	10.09	22.60	12.70
	$\pi_g(A_g + B_g)$	.	1.09	1.63	10.41
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.06	0.09	0.55
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.08	0.12	0.79
	$V(Y_g)$	.	17.18	20.09	18.20
	N	95,914	10,364	6,924	78,626

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Colombia 2018	ICC	0.56	0.49	0.63	0.55
	ICC_{se}	0.00	0.00	0.00	0.00
	$\bar{Y}$	11.44	10.92	9.35	11.61
	π_g	.	0.08	0.05	0.87
	A_g	.	0.27	4.35	0.03
	B_g	.	4.59	9.40	4.86
	$A_g + B_g$	.	4.85	13.75	4.89
	$\pi_g(A_g + B_g)$	.	0.37	0.74	4.26
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.04	0.08	0.45
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.07	0.14	0.79
	$V(Y_g)$	.	9.28	14.85	8.87
	N	1,779,984	136,238	95,214	1,548,532
Costa Rica 2000	ICC	0.66	0.64	0.54	0.66
	ICC_{se}	0.01	0.07	0.10	0.01
	$\bar{Y}$	9.32	8.91	6.24	9.36
	π_g	.	0.02	0.01	0.97
	A_g	.	0.17	9.48	0.00
	B_g	.	10.98	8.79	10.99
	$A_g + B_g$	.	11.15	18.28	10.99
	$\pi_g(A_g + B_g)$	.	0.19	0.21	10.68
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.01	0.01	0.64
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.02	0.02	0.96
	$V(Y_g)$	.	17.27	16.41	16.69
	N	9,458	158	108	9,192

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Costa Rica 2011	ICC	0.58	0.56	0.66	0.57
	ICC_{se}	0.01	0.02	0.05	0.01
	$\bar{Y}$	10.43	9.49	8.83	10.57
	π_g	.	0.10	0.02	0.88
	A_g	.	0.89	2.56	0.02
	B_g	.	7.38	9.99	7.81
	$A_g + B_g$	.	8.26	12.55	7.82
	$\pi_g(A_g + B_g)$	.	0.81	0.21	6.92
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.06	0.02	0.50
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.10	0.03	0.87
	$V(Y_g)$	.	13.12	15.15	13.61
	N	16,336	1,606	276	14,454
Cuba 2002	ICC	0.42	0.38	.	0.45
	ICC_{se}	0.01	0.01	.	0.01
	$\bar{Y}$	10.41	10.29	.	10.53
	π_g	.	0.51	.	0.49
	A_g	.	0.01	.	0.01
	B_g	.	2.45	.	3.03
	$A_g + B_g$	.	2.47	.	3.04
	$\pi_g(A_g + B_g)$	.	1.25	.	1.49
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.19	.	0.23
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.46	.	0.54
	$V(Y_g)$	.	6.45	.	6.70
	N	18,802	9,558	.	9,244

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Cuba 2012	ICC	0.37	0.37	.	0.37
	ICC_{se}	0.01	0.01	.	0.01
	$\bar{Y}$	12.30	12.19	.	12.41
	π_g	.	0.50	.	0.50
	A_g	.	0.01	.	0.01
	B_g	.	2.12	.	2.15
	$A_g + B_g$	.	2.13	.	2.16
	$\pi_g(A_g + B_g)$	.	1.07	.	1.08
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.18	.	0.19
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.50	.	0.50
	$V(Y_g)$	.	5.76	.	5.76
	N	17,408	8,724	.	8,684
Ecuador 2001	ICC	0.66	0.54	0.57	0.67
	ICC_{se}	0.00	0.03	0.03	0.01
	$\bar{Y}$	9.76	8.76	6.57	9.97
	π_g	.	0.06	0.04	0.90
	A_g	.	1.01	10.17	0.04
	B_g	.	9.63	8.79	12.64
	$A_g + B_g$	.	10.65	18.97	12.68
	$\pi_g(A_g + B_g)$	.	0.59	0.78	11.46
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.03	0.04	0.59
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.05	0.06	0.89
	$V(Y_g)$	.	17.75	15.38	19.01
	N	25,910	1,446	1,060	23,404

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Ecuador 2010	ICC	0.63	0.56	0.50	0.63
	ICC_{se}	0.00	0.02	0.03	0.00
	$\bar{Y}$	11.35	9.87	9.14	11.60
	π_g	.	0.07	0.05	0.88
	A_g	.	2.20	4.91	0.06
	B_g	.	8.88	8.35	9.01
	$A_g + B_g$	.	11.08	13.25	9.07
	$\pi_g(A_g + B_g)$	.	0.78	0.66	7.98
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.05	0.04	0.53
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.08	0.07	0.85
	$V(Y_g)$	.	15.84	16.82	14.31
	N	33,604	2,372	1,668	29,564
Ecuador 2022	ICC	0.44	0.38	0.41	0.44
	ICC_{se}	0.00	0.01	0.01	0.00
	$\bar{Y}$	13.34	12.44	12.50	13.46
	π_g	.	0.05	0.07	0.88
	A_g	.	0.82	0.71	0.01
	B_g	.	3.01	3.18	2.27
	$A_g + B_g$	.	3.83	3.89	2.28
	$\pi_g(A_g + B_g)$	.	0.18	0.27	2.01
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.03	0.05	0.36
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.07	0.11	0.82
	$V(Y_g)$	.	7.93	7.79	5.16
	N	596,016	27,806	42,146	526,064

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
El Salvador 2024	ICC	0.57	0.53	0.52	0.57
	ICC_{se}	0.00	0.02	0.02	0.00
	$\bar{Y}$	10.86	10.92	11.37	10.86
	π_g	.	0.01	0.01	0.98
	A_g	.	0.00	0.26	0.00
	B_g	.	6.04	5.18	6.50
	$A_g + B_g$	.	6.04	5.44	6.50
	$\pi_g(A_g + B_g)$	.	0.05	0.05	6.40
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.00	0.00	0.56
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.01	0.01	0.99
	$V(Y_g)$	.	11.40	10.05	11.40
	N	227,420	1,840	1,992	223,588
Guatemala 1964	ICC	0.83	.	0.50	0.81
	ICC_{se}	0.01	.	0.03	0.01
	$\bar{Y}$	2.18	.	0.51	3.33
	π_g	.	.	0.41	0.59
	A_g	.	.	2.79	1.33
	B_g	.	.	0.70	10.55
	$A_g + B_g$	.	.	3.49	11.87
	$\pi_g(A_g + B_g)$	.	.	1.43	7.03
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.14	0.69
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.17	0.83
	$V(Y_g)$	.	.	1.41	12.99
	N	2,892	.	1,180	1,712

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Guatemala 1973	ICC	0.84	.	0.60	0.83
	ICC_{se}	0.01	.	0.03	0.01
	$\bar{Y}$	3.93	.	1.24	5.29
	π_g	.	.	0.34	0.66
	A_g	.	.	7.21	1.86
	B_g	.	.	3.20	15.43
	$A_g + B_g$	.	.	10.40	17.29
	$\pi_g(A_g + B_g)$	.	.	3.50	11.47
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.20	0.64
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.23	0.77
	$V(Y_g)$	.	.	5.34	18.66
	N	3,908	.	1,316	2,592
Guatemala 1981	ICC	0.81	.	0.67	0.80
	ICC_{se}	0.01	.	0.02	0.01
	$\bar{Y}$	4.92	.	2.21	6.25
	π_g	.	.	0.33	0.67
	A_g	.	.	7.29	1.77
	B_g	.	.	6.51	17.41
	$A_g + B_g$	.	.	13.80	19.19
	$\pi_g(A_g + B_g)$	.	.	4.56	12.85
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.21	0.60
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.26	0.74
	$V(Y_g)$	.	.	9.78	21.70
	N	4,948	.	1,634	3,314

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Guatemala 1994	ICC	0.78	.	0.70	0.76
	ICC_{se}	0.00	.	0.01	0.01
	$\bar{Y}$	6.17	.	3.79	7.45
	π_g	.	.	0.35	0.65
	A_g	.	.	5.65	1.62
	B_g	.	.	11.09	16.47
	$A_g + B_g$	.	.	16.74	18.10
	$\pi_g(A_g + B_g)$	.	.	5.84	11.78
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.26	0.52
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.33	0.67
	$V(Y_g)$	.	.	15.78	21.68
	N	15,358	.	5,358	10,000
Guatemala 2002	ICC	0.76	.	0.68	0.74
	ICC_{se}	0.00	.	0.01	0.00
	$\bar{Y}$	7.02	.	4.73	8.30
	π_g	.	.	0.36	0.64
	A_g	.	.	5.23	1.63
	B_g	.	.	12.60	16.64
	$A_g + B_g$	.	.	17.83	18.27
	$\pi_g(A_g + B_g)$	.	.	6.39	11.73
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.27	0.49
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.35	0.65
	$V(Y_g)$	.	.	18.62	22.41
	N	29,660	.	10,624	19,036

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Guatemala 2018	ICC	0.66	0.62	0.63	0.64
	ICC_{se}	0.00	0.02	0.00	0.00
	$\bar{Y}$	8.66	9.54	7.36	9.70
	π_g	.	0.00	0.45	0.55
	A_g	.	0.78	1.68	1.10
	B_g	.	10.24	11.05	10.42
	$A_g + B_g$	.	11.02	12.73	11.51
	$\pi_g(A_g + B_g)$	.	0.03	5.68	6.35
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.00	0.31	0.35
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.00	0.47	0.53
	$V(Y_g)$	.	16.49	17.59	16.28
	N	611,280	1,488	272,900	336,892
Guyana 2012	ICC	0.52	0.36	0.57	0.51
	ICC_{se}	0.01	0.02	0.03	0.02
	$\bar{Y}$	10.16	10.89	8.45	10.08
	π_g	.	0.32	0.11	0.56
	A_g	.	0.54	2.91	0.01
	B_g	.	1.95	4.51	4.06
	$A_g + B_g$	.	2.49	7.41	4.06
	$\pi_g(A_g + B_g)$	.	0.80	0.85	2.29
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.11	0.11	0.30
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.20	0.22	0.58
	$V(Y_g)$	.	5.35	7.87	7.89
	N	8,438	2,714	964	4,760

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Honduras 2013	ICC	0.63	0.60	0.60	0.62
	ICC_{se}	0.01	0.04	0.02	0.01
	$\bar{Y}$	8.19	8.58	6.22	8.35
	π_g	.	0.02	0.08	0.90
	A_g	.	0.15	3.86	0.03
	B_g	.	10.59	10.22	12.28
	$A_g + B_g$	.	10.74	14.08	12.31
	$\pi_g(A_g + B_g)$	.	0.20	1.09	11.13
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.01	0.05	0.56
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.02	0.09	0.90
	$V(Y_g)$	.	17.63	16.93	19.79
	N	24,200	442	1,872	21,886
Nicaragua 2005	ICC	0.70	.	0.68	0.70
	ICC_{se}	0.01	.	0.02	0.01
	$\bar{Y}$	7.91	.	6.96	7.97
	π_g	.	.	0.06	0.94
	A_g	.	.	0.91	0.00
	B_g	.	.	14.54	15.82
	$A_g + B_g$	.	.	15.44	15.82
	$\pi_g(A_g + B_g)$	.	.	0.93	14.87
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.04	0.66
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.06	0.94
	$V(Y_g)$	.	.	21.49	22.48
	N	19,080	.	1,144	17,936

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Panama 1990	ICC	0.63	.	0.67	0.59
	ICC_{se}	0.01	.	0.04	0.01
	$\bar{Y}$	9.82	.	5.33	10.08
	π_g	.	.	0.05	0.95
	A_g	.	.	20.21	0.07
	B_g	.	.	11.70	7.92
	$A_g + B_g$	.	.	31.91	7.99
	$\pi_g(A_g + B_g)$	.	.	1.72	7.56
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.12	0.51
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.19	0.81
	$V(Y_g)$	.	.	17.43	13.43
	N	7,358	.	396	6,962
Panama 2000	ICC	0.63	.	0.63	0.58
	ICC_{se}	0.01	.	0.03	0.01
	$\bar{Y}$	10.40	.	5.82	10.81
	π_g	.	.	0.08	0.92
	A_g	.	.	20.97	0.17
	B_g	.	.	11.42	8.26
	$A_g + B_g$	.	.	32.39	8.43
	$\pi_g(A_g + B_g)$	.	.	2.66	7.74
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.16	0.47
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.26	0.74
	$V(Y_g)$	.	.	18.07	14.27
	N	7,624	.	626	6,998

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Panama 2010	ICC	0.61	0.48	0.58	0.57
	ICC_{se}	0.01	0.04	0.03	0.01
	$\bar{Y}$	10.98	12.09	7.52	11.32
	π_g	.	0.12	0.11	0.77
	A_g	.	1.22	11.99	0.11
	B_g	.	4.24	11.79	7.08
	$A_g + B_g$	.	5.46	23.78	7.19
	$\pi_g(A_g + B_g)$	.	0.66	2.68	5.51
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.05	0.18	0.38
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.08	0.30	0.62
	$V(Y_g)$	.	8.86	20.17	12.50
	N	7,516	916	846	5,754
Panama 2023	ICC	0.53	0.44	0.51	0.48
	ICC_{se}	0.00	0.01	0.01	0.00
	$\bar{Y}$	11.81	12.17	9.90	12.38
	π_g	.	0.31	0.20	0.48
	A_g	.	0.13	3.63	0.32
	B_g	.	3.46	7.68	3.93
	$A_g + B_g$	.	3.59	11.32	4.25
	$\pi_g(A_g + B_g)$	.	1.13	2.29	2.05
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.11	0.22	0.20
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.21	0.42	0.38
	$V(Y_g)$	.	7.91	14.94	8.18
	N	121,682	38,182	24,664	58,836

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Paraguay 2002	ICC	0.69	.	0.70	0.69
	ICC_{se}	0.01	.	0.07	0.01
	$\bar{Y}$	9.12	.	3.59	9.18
	π_g	.	.	0.01	0.99
	A_g	.	.	30.65	0.00
	B_g	.	.	6.59	11.67
	$A_g + B_g$	.	.	37.24	11.68
	$\pi_g(A_g + B_g)$	.	.	0.36	11.57
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	.	0.02	0.67
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	.	0.03	0.97
	$V(Y_g)$	.	.	9.48	17.03
	N	13,210	.	126	13,084
Peru 2017	ICC	0.36	0.40	0.34	0.36
	ICC_{se}	0.00	0.01	0.00	0.00
	$\bar{Y}$	12.41	11.76	12.43	12.45
	π_g	.	0.05	0.27	0.68
	A_g	.	0.42	0.00	0.00
	B_g	.	3.15	1.93	2.26
	$A_g + B_g$	.	3.57	1.93	2.26
	$\pi_g(A_g + B_g)$	.	0.19	0.52	1.54
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.03	0.08	0.25
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.08	0.23	0.69
	$V(Y_g)$	.	7.85	5.74	6.29
	N	887,430	46,176	236,386	604,868

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Suriname 2012	ICC	0.48	0.55	.	0.41
	ICC_{se}	0.03	0.04	.	0.04
	$\bar{Y}$	9.94	9.35	.	10.27
	π_g	.	0.36	.	0.64
	A_g	.	0.35	.	0.11
	B_g	.	4.48	.	2.56
	$A_g + B_g$	.	4.83	.	2.67
	$\pi_g(A_g + B_g)$	.	1.73	.	1.71
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.24	.	0.24
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.50	.	0.50
	$V(Y_g)$	.	8.19	.	6.29
	N	1,452	520	.	932
Uruguay 2006	ICC	0.61	0.52	.	0.61
	ICC_{se}	0.01	0.10	.	0.01
	$\bar{Y}$	10.12	7.85	.	10.16
	π_g	.	0.02	.	0.98
	A_g	.	5.14	.	0.00
	B_g	.	3.88	.	7.02
	$A_g + B_g$	.	9.02	.	7.02
	$\pi_g(A_g + B_g)$	.	0.17	.	6.89
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.02	.	0.60
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.02	.	0.98
	$V(Y_g)$	.	7.53	.	11.47
	N	5,174	100	.	5,074

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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.
Uruguay 2011	ICC	0.65	0.57	0.57	0.64
	ICC_{se}	0.00	0.02	0.02	0.00
	$\bar{Y}$	10.77	8.47	9.68	10.94
	π_g	.	0.06	0.03	0.92
	A_g	.	5.27	1.19	0.03
	B_g	.	5.79	6.20	7.57
	$A_g + B_g$	.	11.06	7.38	7.60
	$\pi_g(A_g + B_g)$	.	0.62	0.19	6.98
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.05	0.02	0.58
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.08	0.02	0.90
	$V(Y_g)$	.	10.14	10.93	11.78
	N	69,162	3,850	1,816	63,496
Uruguay 2023	ICC	0.51	0.41	0.65	0.50
	ICC_{se}	0.02	0.04	0.04	0.02
	$\bar{Y}$	12.41	11.46	11.88	12.78
	π_g	.	0.21	0.09	0.69
	A_g	.	0.91	0.29	0.14
	B_g	.	3.89	6.26	3.81
	$A_g + B_g$	.	4.80	6.55	3.94
	$\pi_g(A_g + B_g)$	.	1.03	0.61	2.73
	$\frac{\pi_g(A_g+B_g)}{V(Y)}$	.	0.12	0.07	0.32
	$\left[\frac{\pi_g(A_g+B_g)}{V(Y)}\right]/ICC$	.	0.24	0.14	0.62
	$V(Y_g)$	.	9.46	9.65	7.60
	N	4,190	898	392	2,900

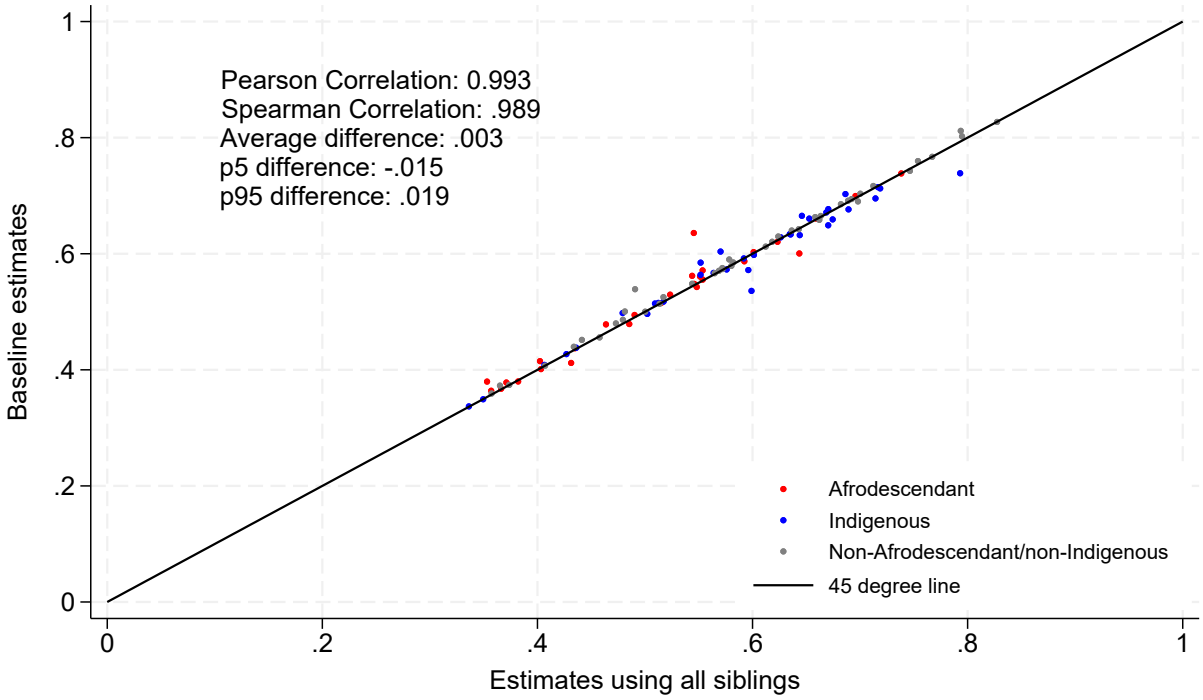
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Table A5 – continued from previous page

Sample	Statistic	Overall	Afrodescendant	Indigenous	Non-afro/non-indig.

Notes: The table reports the components of the decomposition described in Section III for each country-year in the data. Results are presented both at the overall level and, where applicable, disaggregated by group. ICC denotes the intraclass correlation, and Y is the dependent variable, measured as years of schooling. π_g represents the share of each group in the sample. A_g corresponds to the between-group component, while B_g captures the within-group component.

Figure A1: Sibling correlations by group estimated with pairs of siblings vs. all siblings



Note: The figure compares within-group between-family variance (B_g) for individuals classified as Afrodescendant (red circles), Indigenous people (blue diamonds) or Non-afro/non-indigenous (grey squares) estimated with a random pair of siblings (when more than two siblings are identified) and estimated with all the siblings.