

Skin Color and Social Mobility: Evidence from Mexico*

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Introduction

- Racial stratification is a key component in understanding a country's inequality
- In the United States, for example, which includes racial characteristics in official surveys, it has consistently been found that African-Americans have less of a chance to climb the socioeconomic ladder than whites (Mazumder 2014; Jencks and Phillips 2011; Sawhill et al. 2012).
- In most Latin American countries, such analyses are not possible, as official surveys do not include racial or skin color identification.
- This practice results from an ideology of *mestizaje*, or racial mixing, which promoted the idea that stratification was driven only by class and wealth, and not by skin color (González Casanova 1965)
- “According to conventional wisdom, Latin America is a highly discriminatory society” (Chong & Ñopo 2007, IADB Report).
- Indeed, new data sources that include skin color show its relevance to life outcomes throughout Latin America, including in Mexico (Aguilar 2011; Trejo and Altamirano 2016; Arceo-Gomez and Campos-Vazquez 2014; Flores and Telles 2012; Telles et al. 2015; Telles 2014; Telles and Bailey 2013; Telles and Sue 2009; Villarreal 2010)

Motivation

- What we do: we use a novel data source in Mexico to understand not only the effect of skin color on life outcomes like schooling and earnings, but also its relationship to social mobility.
- It is relevant: For policy makers, census data on race and skin color is non-existent. Only one distinction: indigenous and non-indigenous (INEGI, CONEVAL, among others). Thus, affirmative action policies do not exist.
- Anthropological studies have shown that the epithets describing people with darker skin colors, like *indio*, *negro*, and *prieto*, are often pejorative terms or insults, and are assumed to be negative values and qualities, while terms like *güera* mean both "light-skinned" and "pretty."
- The ordinary use of these meanings reflects a deeply-rooted cultural structure (Feagin and McKinney 2002; Oehmichen 2006) that could affect socioeconomic outcomes through pure discrimination or unconscious biases favoring light-skinned individuals.

Data: Social Mobility Survey 2015

- I obtained funding from CONACYT-SEDESOL to conduct a social mobility survey. Data available at <http://movilidadsocial.colmex.mx/>
- Representative at the urban level (+100,000).
- Households with at least one adolescent (12-18) member present in the home (2,616 households). Separate interviews to 1 parent and 1 adolescent child. We only focus on parent sample.
- It includes: educational and dwelling data, employment status, income, and occupation.
- It includes: cognitive and non-cognitive skills, as well as family environment in the household of origin
 - Cognitive ability: Raven (10 mat) + Digit span (5 q) + Animals (30sec) → PCA.
 - No-cognitive skills: Big-Five (10 q) + Locus of Control (10 q) + Grit (8 q) → PCA.
 - Parenting style (4 options): 1) the closeness of respondents' emotional relationships with their fathers and mothers, 2) the degree to which respondents' parents understood their concerns and problems, 3) the number of school activities respondents did with their parents, 4) the amount of spare time respondents spent with their fathers and mothers, and 5) the consistency of their parents' rules.
 - Stress in the parental home (4 options): 1) the frequency of insults, shouts, and threats in the parental home, 2) the frequency with which respondents felt emotionally close to other household members, and 3) the frequency of fears and concerns within the household.

Social Mobility Survey 2015: Wealth Index

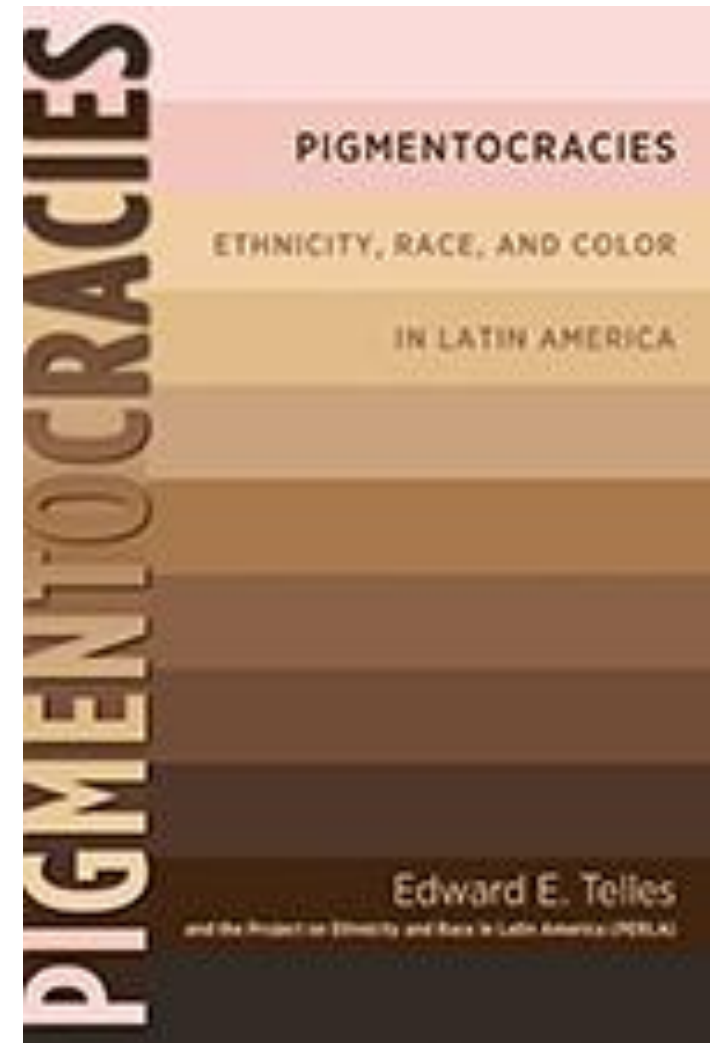
- We calculate intergenerational mobility using an approach similar to that of Torche (2015), with self-reported household-level information at the time of the interview (current household) and retrospective information for when the respondent was 14 years old (parental household).
- This information serves as a proxy for family socioeconomic status.
- To compare levels of socioeconomic status, we construct two indices of economic well-being, one for the parental and the other for the current household, using a primarily asset-based approach and principal component analysis (PCA).

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- For the parental index, dummy variables for asset ownership are used for the following: shower, washing machine, gas or electric stove, refrigerator, landline telephone, water heater, television, automobile, indoor bathroom, and domestic workers employed. We also include information on parental ethnoracial background (indigenous or not), parental education (elementary school or not), number of bedrooms per household member, and whether the household was in a rural or urban area.
- For the current wealth index we compute the PCA over dummy variables for asset ownership of the following: shower, washing machine, gas or electric stove, refrigerator, landline telephone, water heater, internet, cable television, and the number of television sets, cell phones, automobiles, personal computers, complete bathrooms, and domestic workers employed. Three other household characteristics are included: number of rooms and light bulbs per household member, and a dummy variable for dirt floor.

Social Mobility Survey 2015: Skin Color

- The social mobility survey uses the PERLA (Project on Ethnicity and Race in Latin America) color palette described in Telles (2014), in order to build a strong representation of skin color.
- Each interviewer received detailed training in rating respondents' skin color according to the palette of eleven skin tones (1 = lightest, 11 = darkest) and was instructed not to take into account any other factor in doing so.
- Our skin color measure is not self-reported.

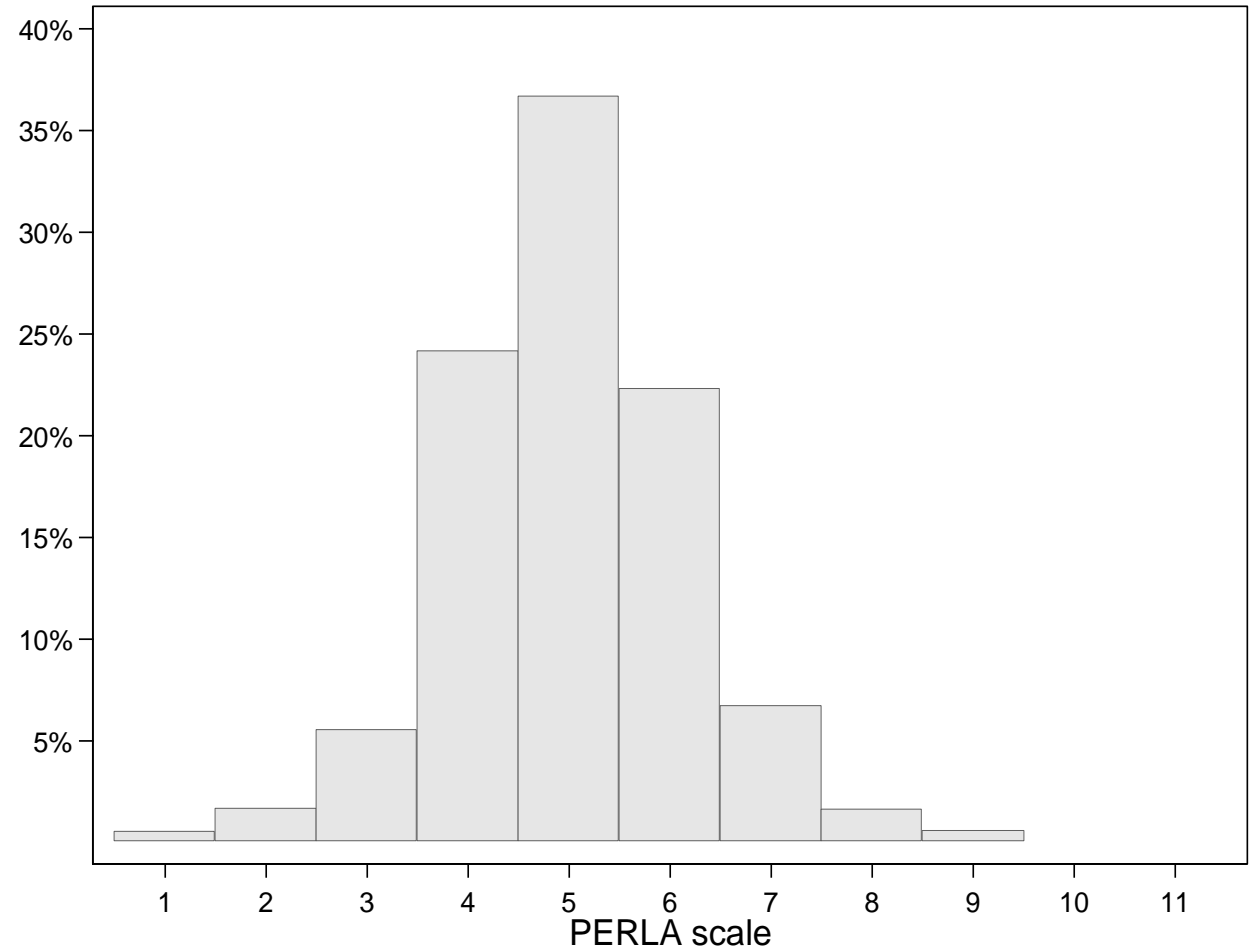


<https://perla.princeton.edu/>

Goals

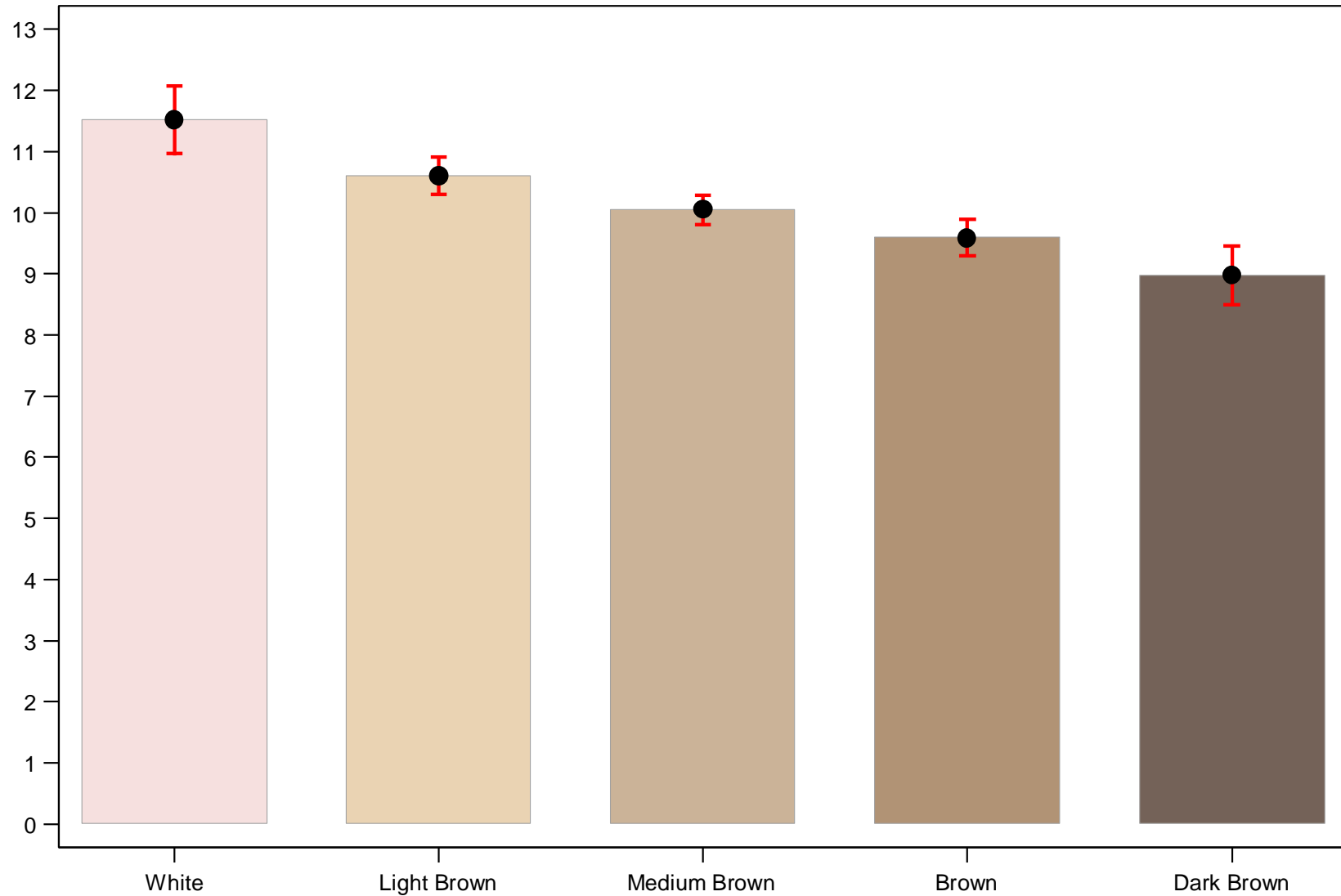
- Descriptive statistics
- Relationship btw skin color and educational outcomes and earnings.
- Relationship btw skin color and social mobility

Color Palette



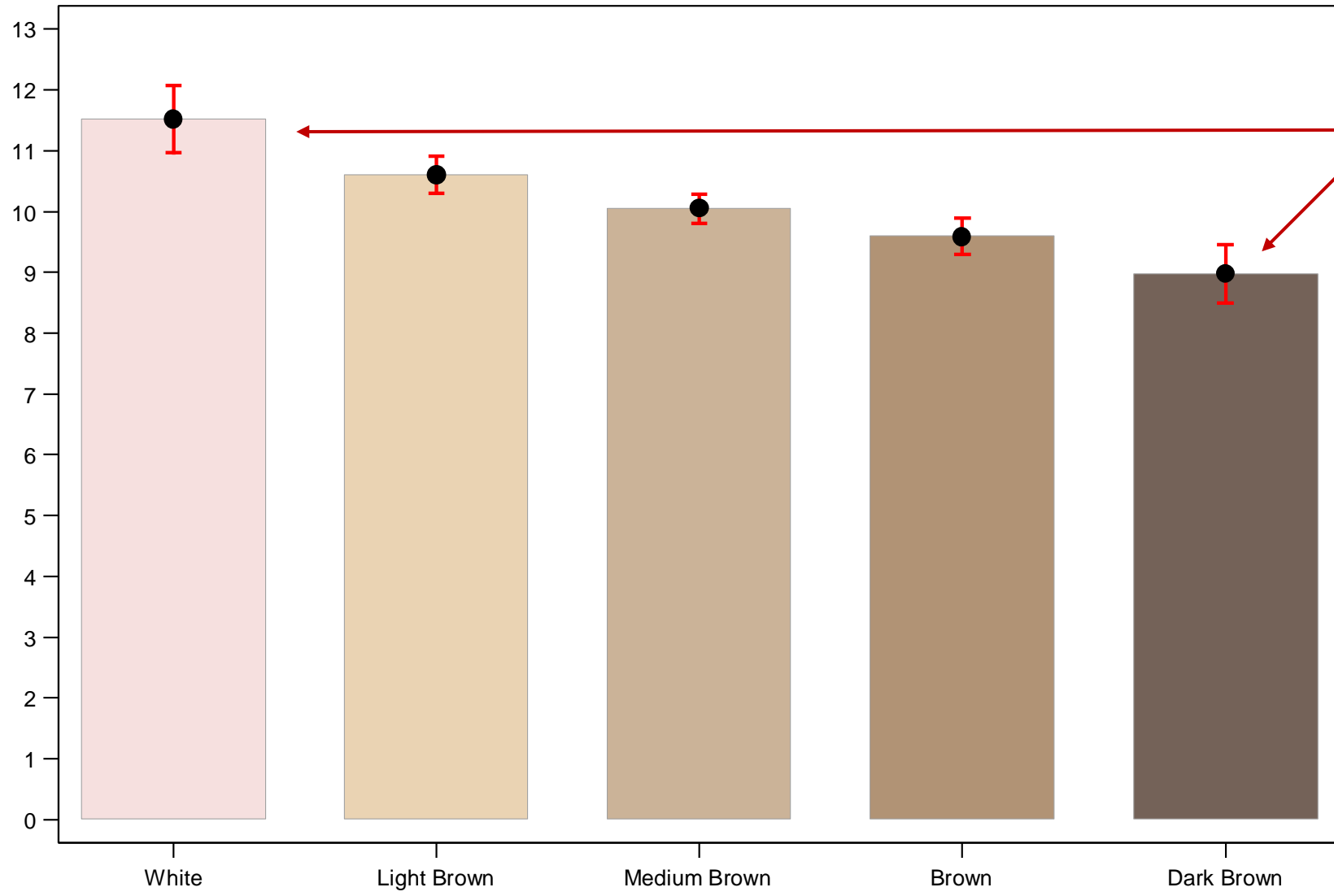
White: 1; Light Brown: 4; Medium Brown: 5; Brown: 6; Dark Brown: 7-11.

Years of schooling & skin color



● Average years of schooling — 90% CI

Years of schooling & skin color

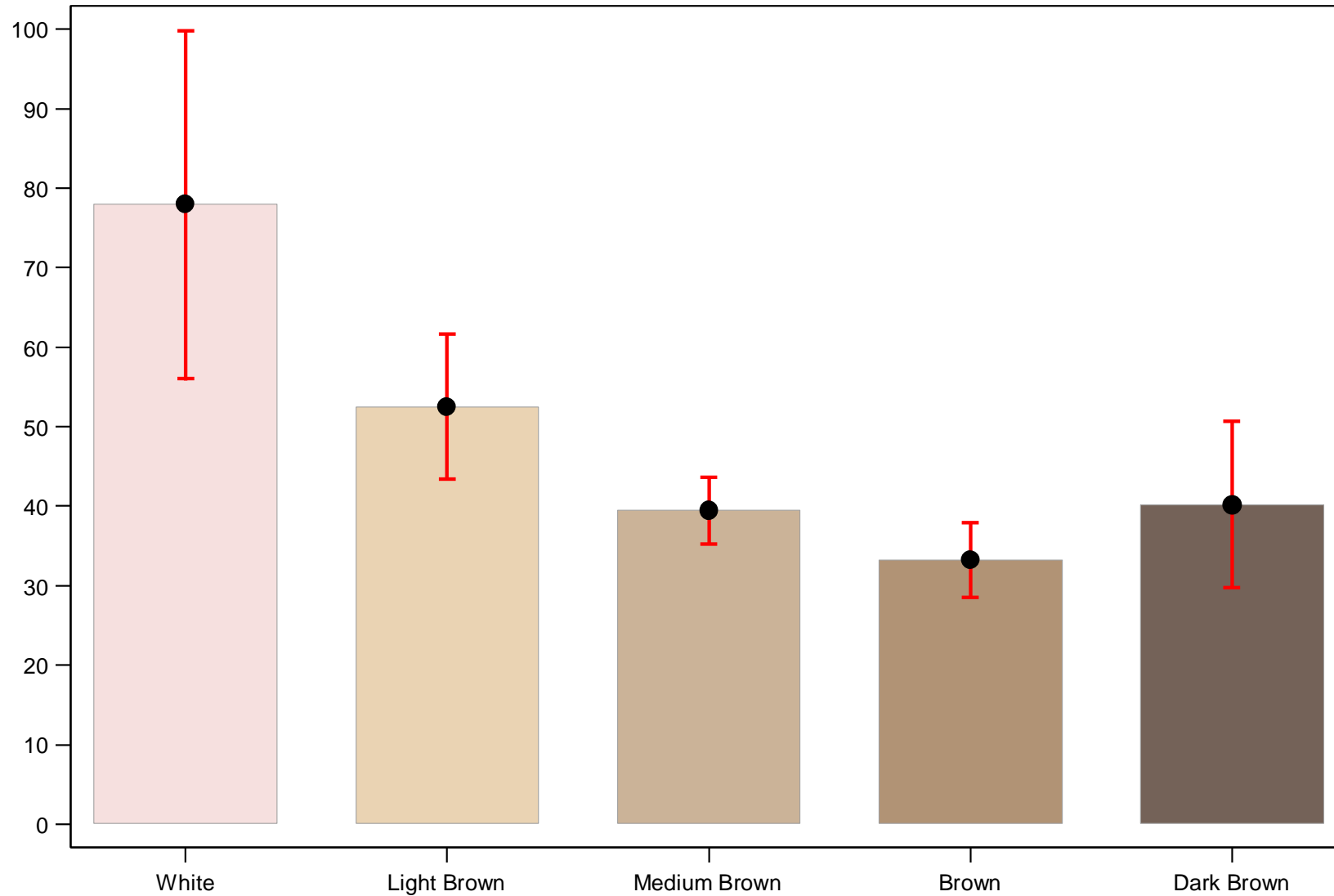


Difference of **1.5** years of schooling with no controls.

Controlling for skills and parental background, **Whites (tones 1-3) earn 1.4 more years of schooling than their darkest counterparts (7-11)**. (but no longer significant for light, medium and Brown)

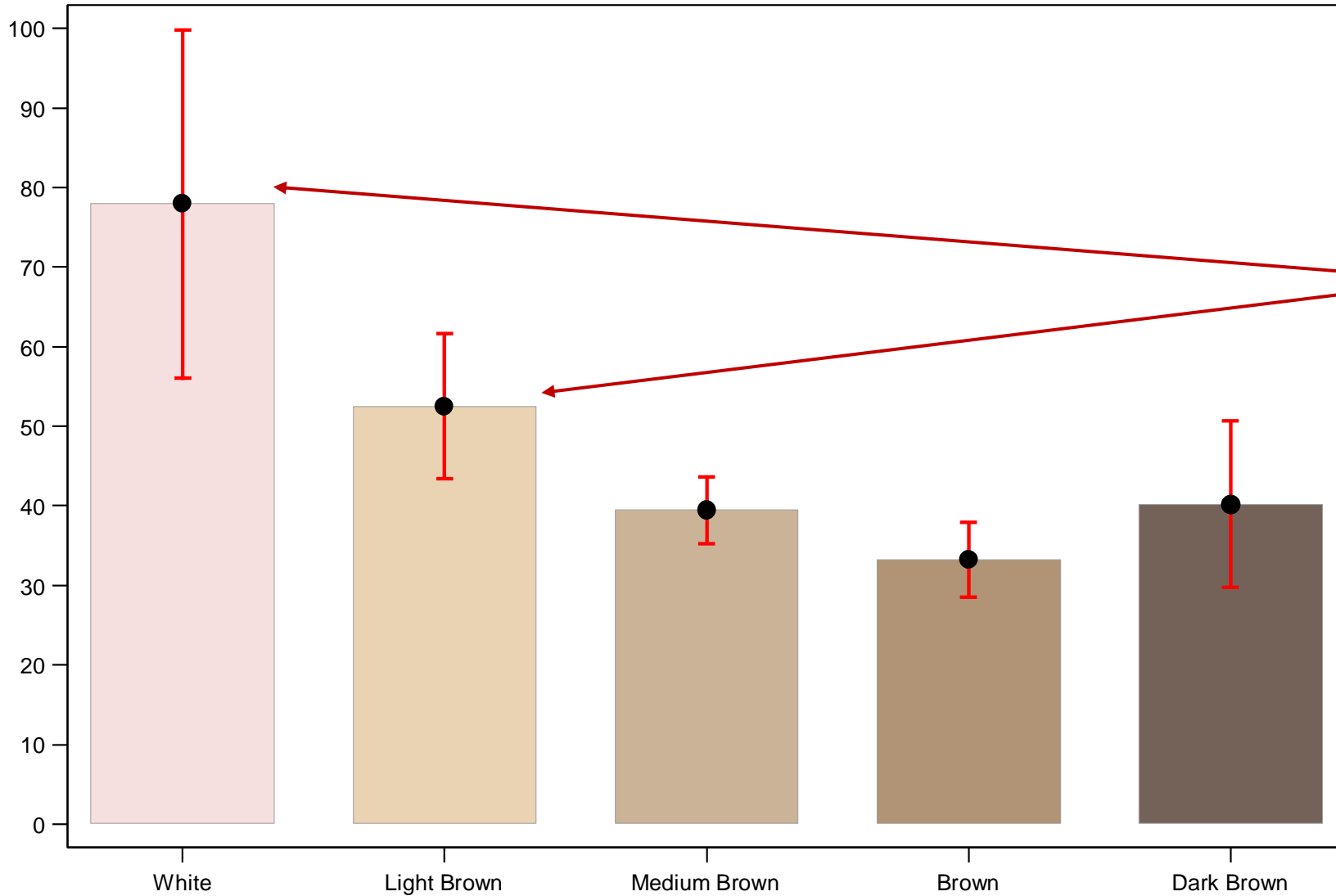
● Average years of schooling — 90% CI

Hourly wage & skin color



● Hourly wage — 90% CI

Hourly wage & skin color

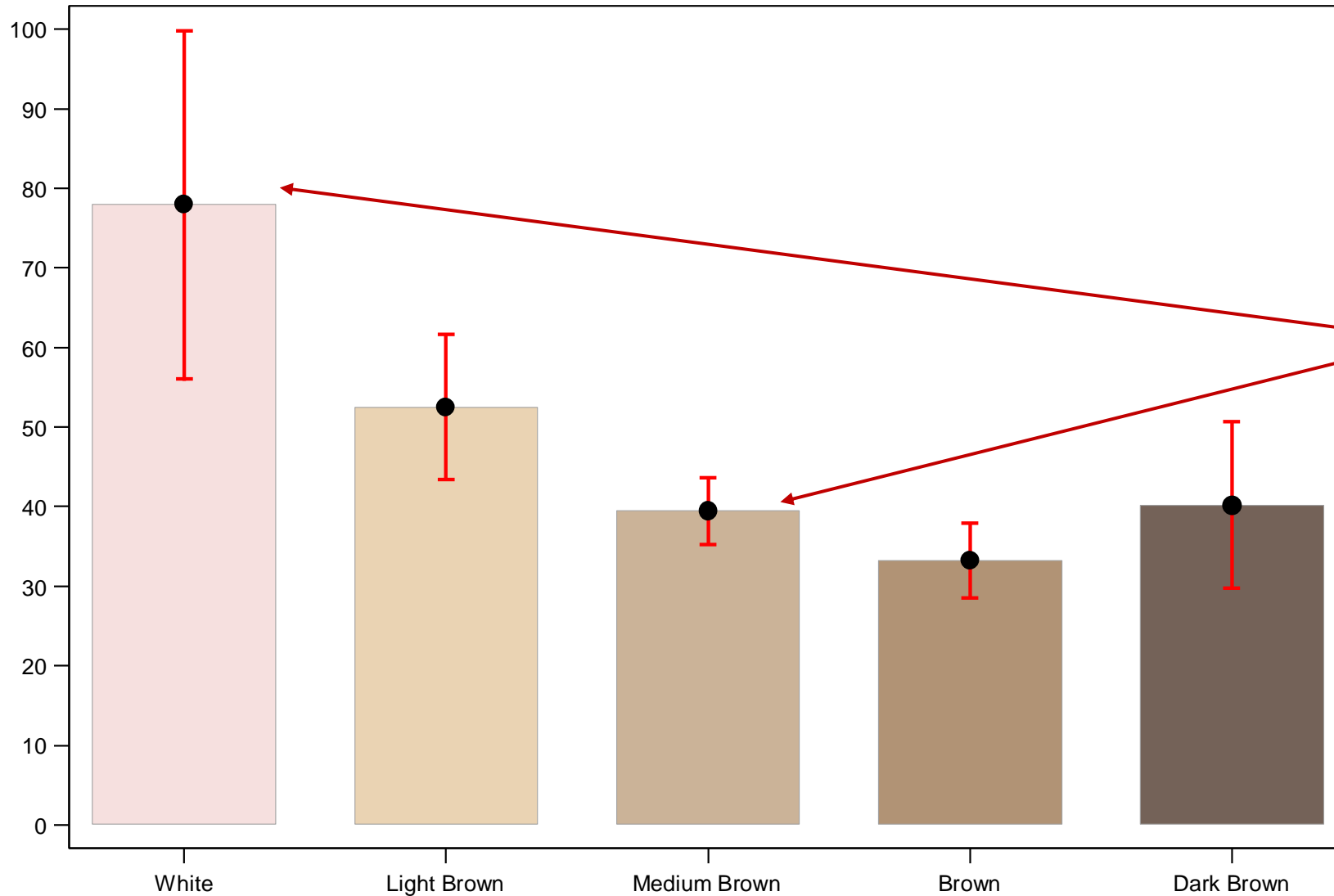


After controlling for skills and parental background, there is a strong skin color gradient. They earn less than Whites

Light Brown: 37%

● Hourly wage — 90% CI

Hourly wage & skin color



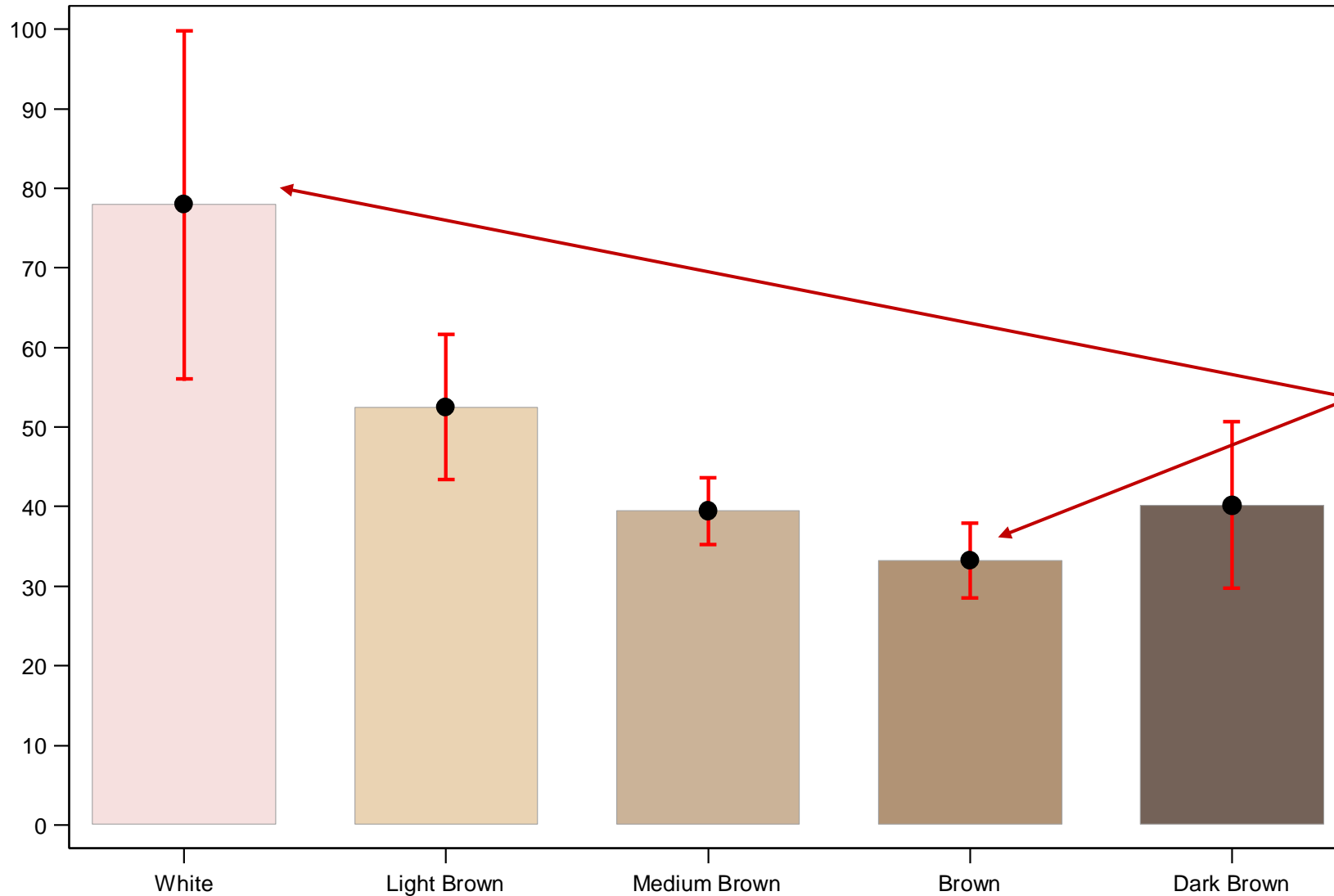
After controlling for skills and parental background, there is a strong skin color gradient. They earn less than Whites

Light Brown: 37%

Medium Brown: 37%

● Hourly wage — 90% CI

Hourly wage & skin color

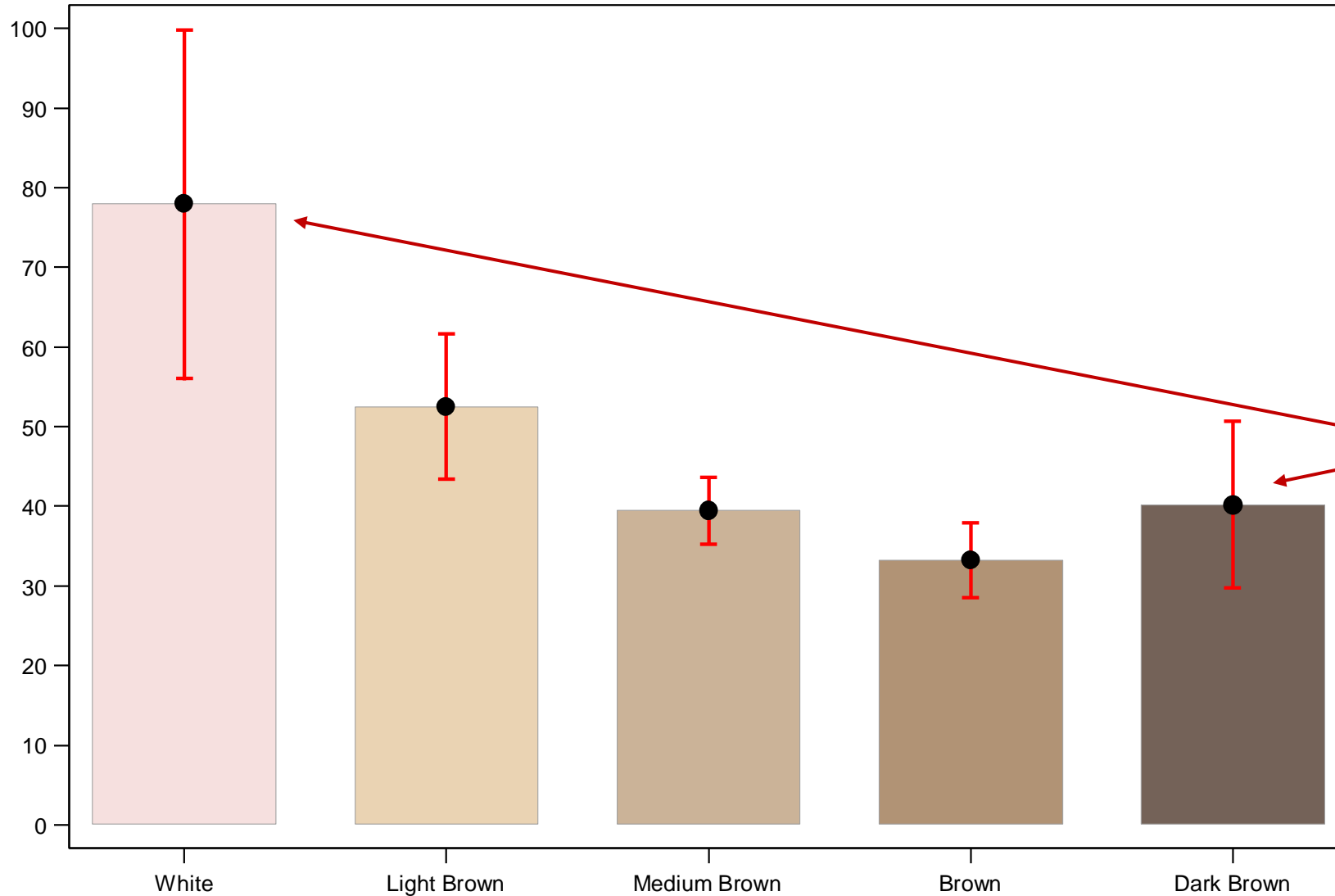


After controlling for skills and parental background, there is a strong skin color gradient. They earn less than Whites

Light Brown: 37%
Medium Brown: 37%
Brown: 54%

● Hourly wage — 90% CI

Hourly wage & skin color



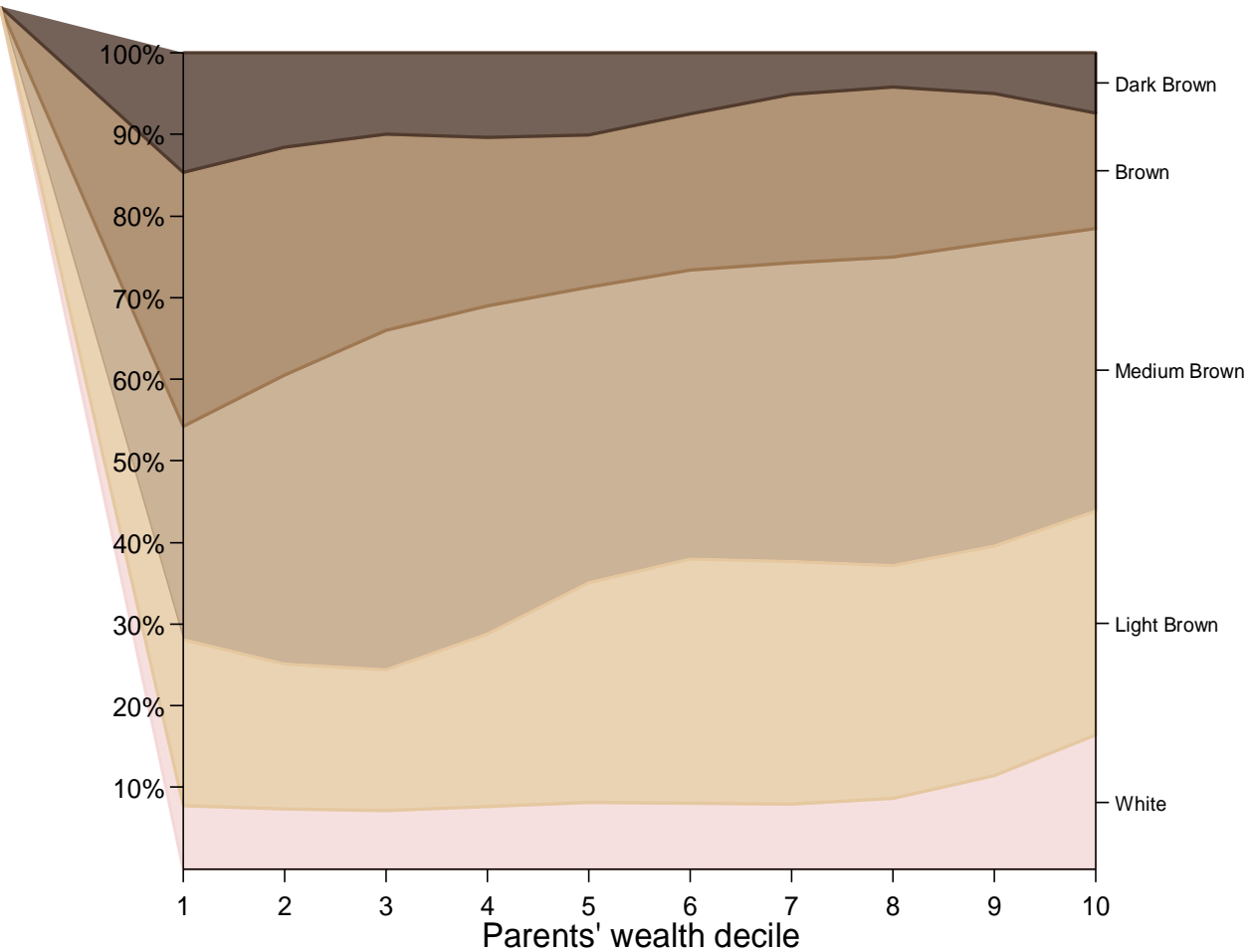
After controlling for skills and parental background, there is a strong skin color gradient. They earn less than Whites

Light Brown: 37%
Medium Brown: 37%
Brown: 54%
Dark Brown: 53%

● Hourly wage — 90% CI

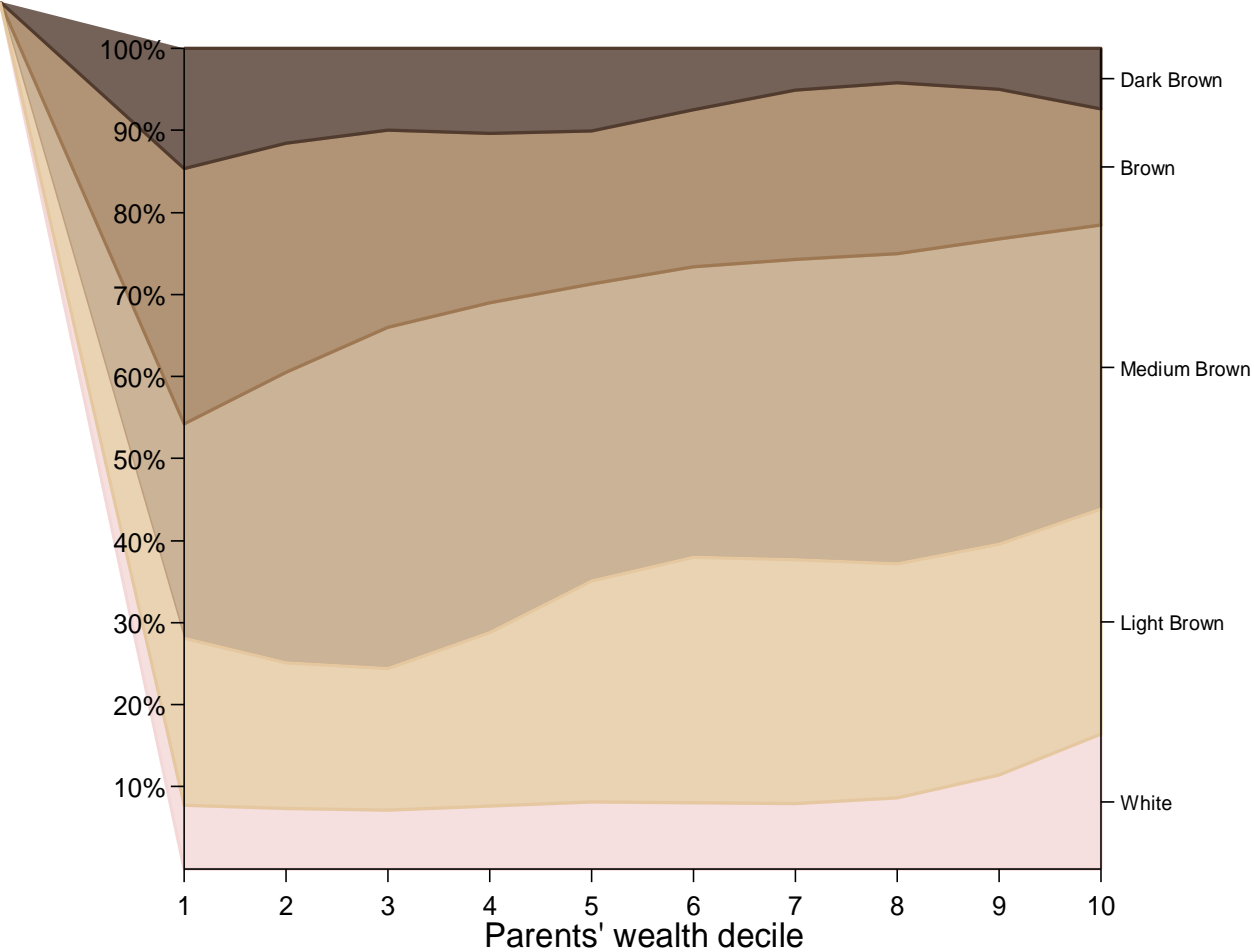
Social Mobility and Skin Color

A. By parental wealth (decile)

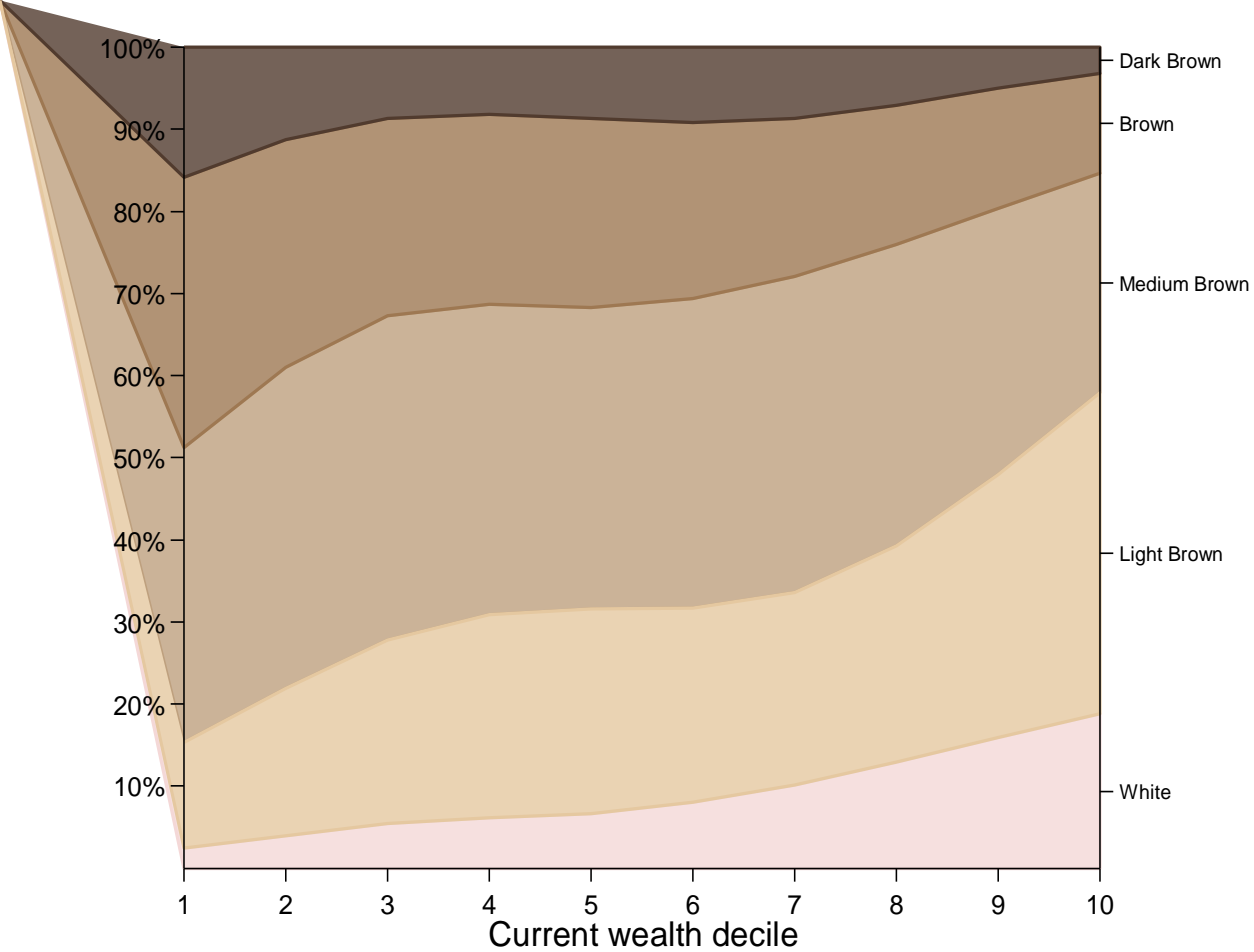


Social Mobility and Skin Color

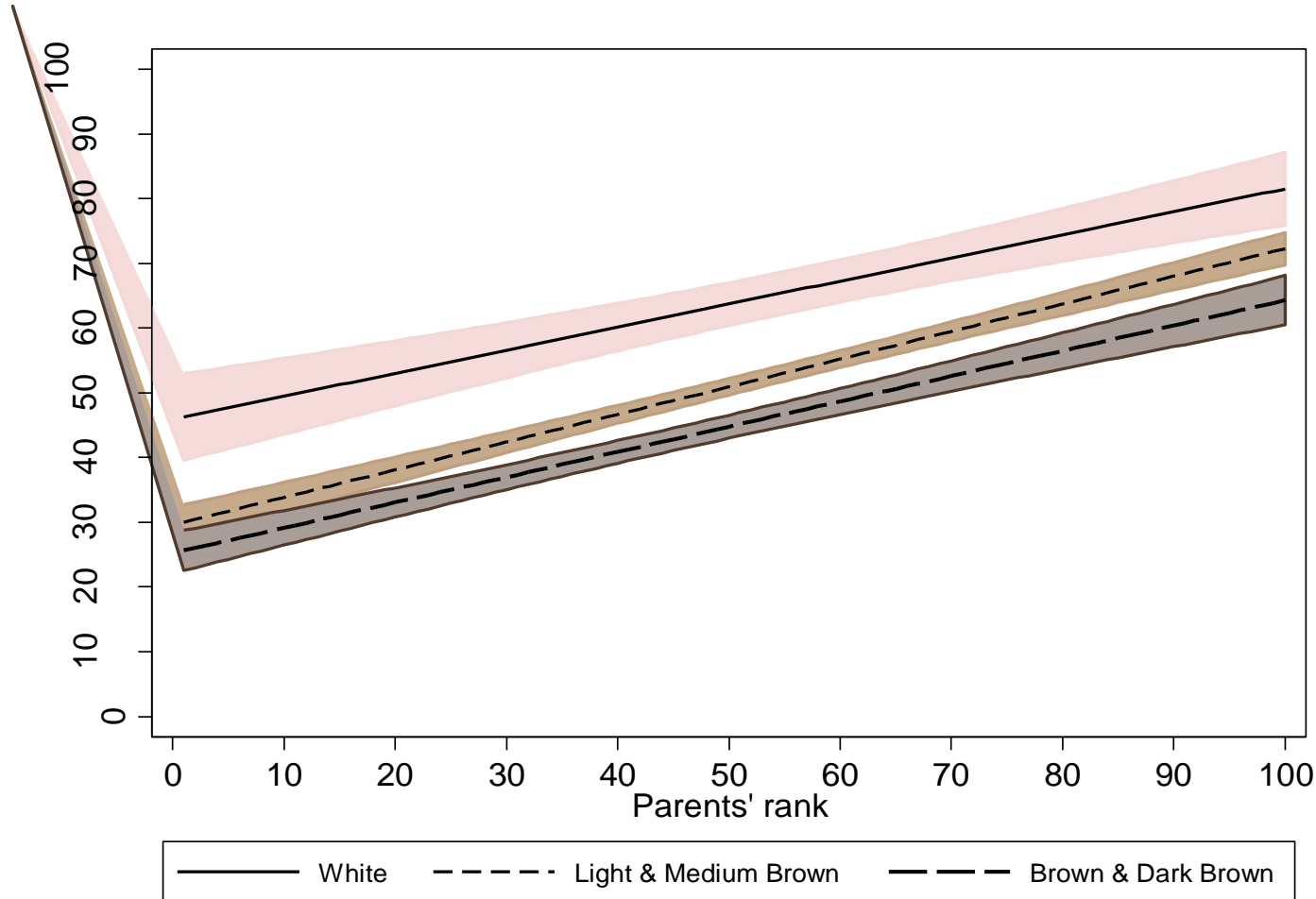
A. By parental wealth (decile)



B. By current wealth (decile)



Social Mobility and Skin Color



The slopes for the White, Brown, and Dark Brown groups are 0.36 (s.e. 0.05), 0.43 (0.02), and 0.39 (0.03), respectively.

- Current rank = $A+B \times \text{Parents' Rank}$
- Regardless of their starting point, whites are able to move upward more easily.
- Suggests that there are advantages associated with light skin color that begin in the parental home and continue through adulthood, with corresponding disadvantages for the darkest skin color.

Transition Matrices

A. White (PERLA 1-3)

		Current wealth				
		Q1	Q2	Q3	Q4	Q5
Parents' wealth	Q1	12.4	19.5	17.4	45.9	4.7
	Q2	16.5	16.6	22.3	22.6	22.0
	Q3	5.8	25.2	11.0	21.6	36.5
	Q4	1.9	21.2	12.7	28.7	35.6
	Q5	1.0	2.8	8.7	28.5	59.9

B. Brown and Dark Brown (PERLA 6-11)

		Current wealth				
		Q1	Q2	Q3	Q4	Q5
Parents' wealth	Q1	47.8	25.1	11.7	10.8	4.7
	Q2	25.2	30.0	23.8	17.3	3.6
	Q3	27.6	23.9	15.9	22.6	10.1
	Q4	22.0	14.4	30.5	19.7	13.5
	Q5	6.9	13.4	23.1	26.4	30.4

Relative Rank Change: Actual Rank – Parental Rank

A. Using standardized skin tone

Skin tone (std.)	-5.56***
	[1.499]

B. Using skin tone groups

Light Brown	-8.46
	[6.665]
Medium Brown	-19.29***
	[6.198]
Brown	-18.04***
	[6.437]
Dark Brown	-23.05***
	[6.923]

- ↑1 sd darker skin color 5 percentiles ↓.
- Dark Brown group moves more than 20 percentiles less than the White group.
- Results depict stratification in current wealth associated with skin color
- No relationship btw skin color & mobility **in the mean.**

Controlling for gender, age, age squared, parental ethnicity (indigenous) and both parents present in the household of origin, as well as the variables of parenting style and stress in the household of origin. Also, an interaction between parental wealth and skin color.

Conclusions

- Our results are in line with previous studies and provide empirical evidence of profound social stratification by skin color. Mexicans with darker skin color attain significantly less education than their lighter-skinned counterparts. They also have lower wages.
- Those with darker skin are 20 percentile ranks lower in the current wealth distribution than their lighter-skinned counterparts with the same level of parental wealth.
- Individuals with the darkest skin color also show higher downward mobility than other groups.
- Future research is needed to explore the importance of factors besides labor-market discrimination to explain such difference. For example, role models, aspirations, skill formation due to unconscious biases.