Race and ethnicity

Ernesto F. L. Amaral

November 03–10, 2020 Population and Society (SOCI 312)



www.ernestoamaral.com

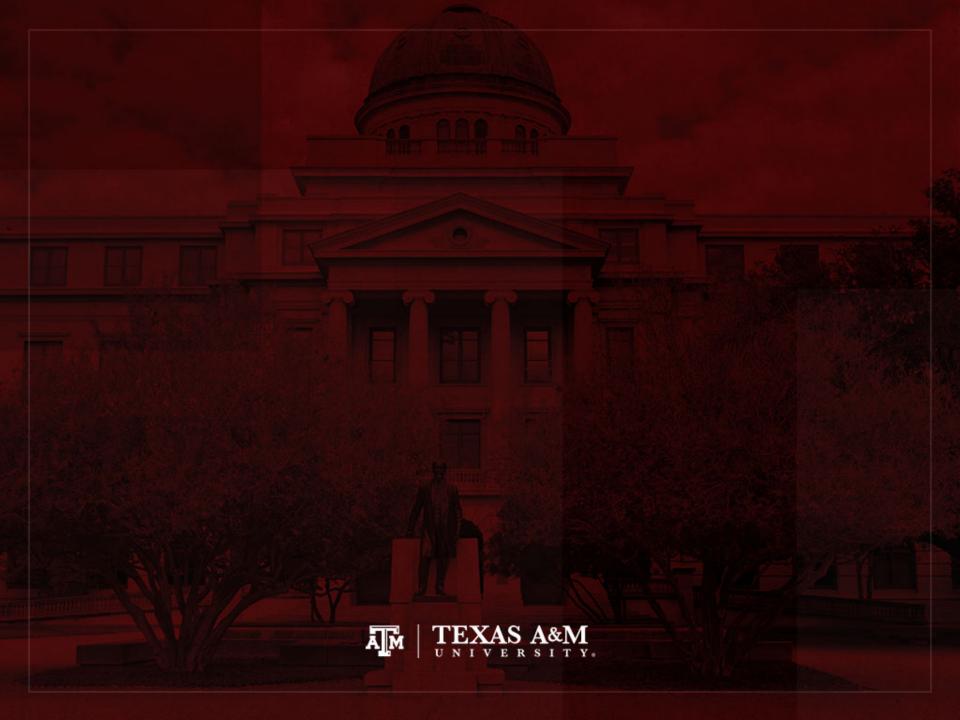
Outline

- Why do demographers study race and ethnicity?
- Brief history of race and ethnic categories
- Patterns of race and ethnicity in the U.S.
- Cultural adaptation
- Black hypersegregation
- Inequality of opportunity



Why do demographers study race and ethnicity?

- Different race/ethnicity groups have different levels of fertility, mortality, and migration rates
- Hispanics have higher birth rates and lower death rates than non-Hispanic whites, blacks and Native Americans
- Hispanics and Asians have higher international migration rates than non-Hispanic whites, blacks, or Native Americans
- Hispanics have higher internal migration rates than other groups



Brief history

of race and ethnic categories

- The concepts of race and ethnicity are often used interchangeably by demographers, but they are really two different terms
 - Race is associated with physical characteristics
 - Ethnicity is related to behavioral or cultural attributes
- The U.S. Census and the American Community Survey contain two questions dealing with race and ethnicity
 - One question asks whether the person is of Hispanic, Latino or Spanish origin
 - The second question asks about the person's race



Taxonomy

- Carl Linnaeus (1707–1778)
 - Swedish scientist
 - He is recognized as the father of taxonomy, branch of science concerned with classification
- He published the first edition of his Systema Naturae (System of Nature) in 1735
 - It offered the first authoritative and systematic classification of human variation
 - It favored skin color as the distinguishing trait
 - The colors were reddish, sallow, black, and white
 - They represented: Americanus (American Indian), Asiaticus, Africanus, and Europeaeus



Brown

- Johann Blumenbach (1752–1840), added a fifth category to the four categories of Linnaeus
 - Caucasian
 - Mongolian
 - Malay (brown)
 - American Indian
 - Negro (Ethiopian)
- This taxonomy influenced Western science and culture
 - It created the familiar color-denominated racial pentagon
 - White, yellow, brown, red, and black



Continuing influence of Linnaeus and Blumenbach

- Race has been part of every census since the first census conducted in 1790
 - There have been a lot of changes in the statistical categorization of race and ethnicity in the U.S. since 1790
- Despite all changes, we are still using similar racial categories that were first developed in 1776
 - Hispanics
 - Non-Hispanic (NH) race groups: NH-whites, NH-blacks, NH-Asians, NH-Native Americans (or American Indians)
 - These represent the same color groups: brown, white, black, yellow, red



1790 American Census

- Assistant marshals listed the name of each head of household and the number of persons in each household of the following descriptions
 - Free White males of 16 years and upward (to assess the country's industrial and military potential)
 - Free White males under 16 years
 - Free White females
 - All other free persons
 - Slaves

https://www.census.gov/history/www/through_the_decades/index_of_questions/1790_1.html

https://www.census.gov/history/www/through_the_decades/overview/1790.html

https://www.census.gov/programs-surveys/decennial-census/decade/decennial-publications.1790.html

https://www.census.gov/library/publications/1793/dec/number-of-persons.html

https://www.census.gov/library/publications/1907/dec/heads-of-families.html



SCHEDULE of the whole number of PERSONS within the feveral Districts of the UNITED STATES, taken according to "An Act providing for the Enumeration of the Inhabitants of the United States;" passed March the 1st, 1790.

-						
DISTICTS	Freewbite Males cf:6years and up- wards, including beads cf families.		Free vubite Fe- males, i-vicluting beads of fumilies.	All other free fer- fons.	Slaves.	Total.
Vermont N. Hampfbire Maine Maffachufetts Rhode Ifland Connecticut New York New Yerfey Pennfylvania Delaware Maryland Virginia Kentucky	22435 36086 24384 95453 16019 60523 83700 45251 110788 11783 55915 110936 15154	12143 51339 116135 17057	28922	12866	NONE 948 2764 21324 11423 3737 8887 103036 292627 12430	73677
N. Carolina S. Carolina Georgia	69988 35576 13103	775¢6 37722 14044	14071¢ 6688c 25739	1801 398		249 973 82548
	807094	791,850	1541263	59150	694280	3893635
Total number of Inhabitants of the United States exclutive of S. Weitern and N. Territory.	ee white of 21 and up-	Fire Males under 21 years of age.	white	All other Ver- Jons.	Slaves.	Total
S.W. territory N. Ditto		10277	15365	361	3417	35691



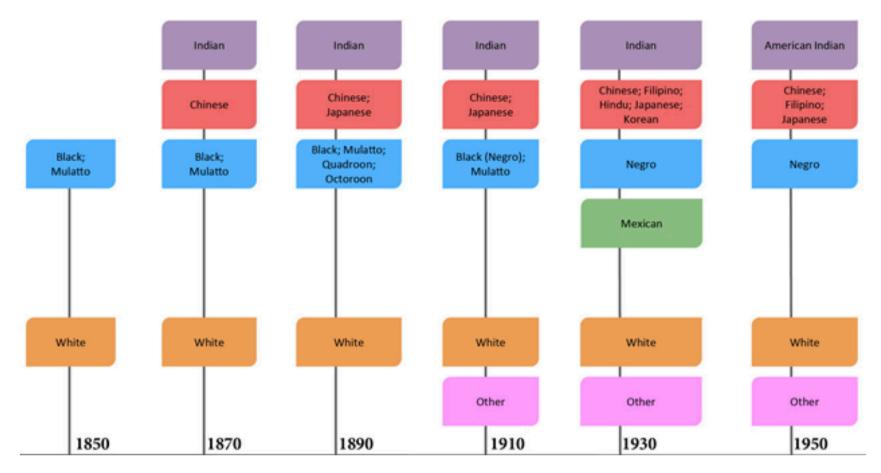
https://www.census.gov/library/publications/1793/dec/number-of-persons.html

Three-Fifths Compromise

- It was reached among state delegates during the 1787 U.S. Constitutional Convention
 - It ruled how to count slaves to determine a state's population for legislative and taxing purposes
 - Population size would be used to determine the number of seats that the state would have in the U.S. House of Representatives for the next ten years
- It counted three out of every five slaves as a person
 - It gave southern states 1/3 more seats in Congress and 1/3 more electoral votes than if slaves had been ignored
 - It gave fewer representation if slaves and free people had been counted equally
 - This allowed slaveholder interests to dominate the U.S. government until 1861



1850–1950 American Censuses



A portion of the U.S. Census Bureau's interactive graphic shows the history of the race question on its survey.

U.S. Census Bureau/Screenshot by NPR

Source: <u>https://www.npr.org/sections/codeswitch/2015/11/09/455331023/a-graphic-shows-how-much-the-race-guestion-on-the-census-and-america-has-changed</u>.

More on race question

- 1970
 - Hispanic origin question
- 1980
 - Ancestry question
- 1990
 - Asian and Pacific Islander groups
 - "Other Asian" category
- 2000
 - Allowed to mark one or more races
- What Census Calls Us: A Historical Timeline
 - By Pew Research Center
 - <u>http://www.pewsocialtrends.org/interactives/multiracial-timeline/</u>

Current federal standards

- 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity
- Standard has five minimum categories for data on race
 - American Indian or Alaska Native
 - Asian
 - Black or African American
 - Native Hawaiian or Other Pacific Islander
 - White
- There are two categories for data on ethnicity
 - Hispanic or Latino
 - Not Hispanic or Latino



Debate about more changes

- Census Bureau spent years studying how to collect data on race and ethnicity more accurate
- Combination of two census questions about race and ethnicity (Hispanic origin)
 - "Hispanic, Latino, or Spanish" as an option for race and ethnicity
 - Many Latinos have left race blank or chose "some other race"
 - "Some other race" was the 3rd largest group in 2000 and 2010
- Inclusion of "Middle Eastern or North African" (MENA) category
 - It would be separated from White
- MENA category is important for integration and civic participation

https://www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/final-analysis/2015nctrace-ethnicity-analysis.html

https://www.npr.org/2018/01/26/580865378/census-request-suggests-no-race-ethnicity-data-changes-in-2020-experts-say https://www.npr.org/2017/11/22/564426420/how-the-u-s-defines-race-and-ethnicity-may-change-under-trump https://www.npr.org/2018/02/01/582338628/-what-kind-of-white-2020-census-to-ask-white-people-about-origins



Dimensions and testing paths

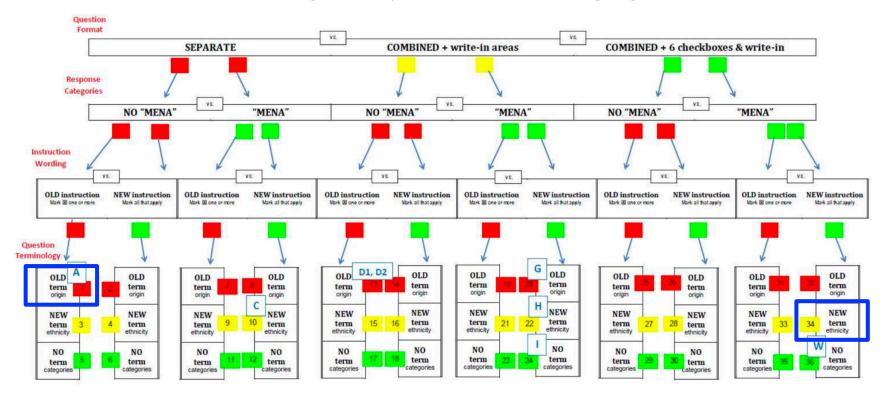


Figure 3. 2015 NCT Key Dimensions and Research Treatment Paths for Design Testing

The ones marked with a blue box have examples in the following slide

Source: 2015 National Content Test Race and Ethnicity Analysis Report.

 NOTE: Please answer BOTH Question & about Hispanic origin and Question 9 about race. For this census, Hispanic origins are not races. 8. Is Person 1 of Hispanic, Latino, or Spanish origin? Mark X one or more boxes AND print origins. No, not of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, Salvadoran, Dominican, Colombian, Guatemalan, Spaniard, Ecuadorian, etc. x 9. What is Person 1's race? Mark X one or more boxes AND print origins. White ~ Print, for example, German, Irish, English, Italian, Lebanese, Egyptian, etc. x 	Separated	 8. What is Person 1's race or ethnicity? Mark all boxes that apply AND print ethnicities in the spaces below. Note, you may report more than one group. WHITE - Provide details below. German Irish English Italian Polish French Print, for example, Scottish, Norwegian, Dutch, etc. HISPANIC, LATINO, OR SPANISH - Provide details below. Mexican Puerto Cuban American Dominican Colombian Print, for example, Guatemalan, Spaniard, Ecuadorian, etc. BLACK OR AFRICAN AMERICAN - Provide details below. African Jamaican Haitian Nigerian Somali Print, for example, Chanaian, South African, Barbadian, etc.
 Black or African Am Print, for example, African American, Jamaican, Haitian, Nigerian, Ethiopian, Somali, etc American Indian or Alaska Native - Print name of enrolled or principal tribe(s), for example, Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, etc 	VS.	ASIAN – Provide details below. Obinese Filipino Obinese Filipino Obinese Filipino Vietnamese Korean Japanese Japanese Print, for example, Pakistani, Cambodian, Himong, etc. AMERICAN INDIAN OR ALASKA NATIVE – Print, for example, Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Tlingit, etc.
Chinese Vietnamese Native Hawaiian Filipino Korean Samoan Asian Indian Japanese Chamorro Other Asian – Print, for example, Pakistani, Cambodian, Hmong, etc. z Other Pacific Islander – Print, for example, Marshallese, etc. z		MIDDLE EASTERN OR NORTH AFRICAN – Provide details below Lebanese Iranian Egyptian Syrian Moroccan Israeli Print, for example, Algerian, Iraqi, Kurdish, etc.
 ⇒ If more people were counted in Question 1 on the front page, continue with Person 2 on the next page. 	& MENA	→ If more people were counted in Question 1 on the front page.

Source: 2015 National Content Test Race and Ethnicity Analysis Report.

2020 Census: Same question

- Separated question for race and ethnicity
- No Middle Eastern or North African (MENA) category

FOR IMMEDIATE RELEASE: FRIDAY, JANUARY 26, 2018

Census Bureau Statement on 2020 Census Race and Ethnicity Questions

January 26, 2018 Release Number: CB18-RTQ.02



2		в
RSS	Email	SMS

RESPONSE TO QUERY

Jan. 26, 2018 – The 2020 Census race and ethnicity questions will follow a two-question format for capturing race and ethnicity for both the 2018 Census Test and the 2020 Census, which adheres to the 1997 Standards for the Classification of Federal Data on Race and Ethnicity (Statistical Policy Directive No. 15) set by the Office of Management and Budget. The Census Bureau will not include a combined question format for collecting Hispanic origin and race, or a separate Middle Eastern or North African category on the census form. The upcoming 2018 Census Test in Providence County, R.I., which begins on March 16, will reflect the proposed 2020 Census race and ethnicity questions.

The Census Bureau remains on schedule as it implements the operational plan and will provide the planned 2020 Census questionnaire wording to Congress by March 31, 2018, as directed by law. The Census Bureau will continue to further its extensive research on how to collect accurate race and ethnicity data across its surveys.

Subjective & objective questions

- Subjective measures
 - Race
 - Hispanic origin
 - Ancestry or ethnic origin (American Community Survey)
- Objective measures
 - Nativity: parents' place of birth (Current Population Survey)
 - Language: home language, English competence
- Most Americans tend to simplify their origins and report a single identity
 - Identities associated with physical appearance are more difficult to leave out than language or culture





Patterns of race and ethnicity in the United States

- According to the 2010 census
 - The non-Hispanic white comprised less than 64% of the US population: the lowest ever recorded
- Since 2000
 - Black population has remained around 12%
 - The Asian percentage has increased slightly
 - Persons checking two or more races has also changed a little
 - The Hispanic population has experienced the largest increases: from 12.5% in 2000 to 16.3% in 2010

US population by race/ethnicity, 2000 and 2010

	20	00	201	.0
Population group	Number (thousands)	Percent	Number (thousands)	Percent
Total	281,422	100.0	308,746	100.0
Non-Hispanic				
White	194,553	69.1	196,818	63.7
Black	33,948	12.1	37,686	12.2
Asian	10,123	3.6	14,465	4.7
Native Hawaiian and Other Pacific Islander	354	0.1	482	0.2
American Indian/ Alaska Native	2,069	0.7	2,247	0.7
Some Other Race	468	0.2	604	0.2
Two or more races	4,602	1.6	5,966	1.9
Hispanic	35,306	12.5	50,478	16.3



Source: Mather, Pollard, Jacobsen (2011).

Majority-minority population

- Majority-minority population: over 50% of the population is comprised of minorities
 - Between 2000 and 2010 the minority population in all
 50 states grew faster than the majority population
- As of 2010, four states and the District of Columbia were majority-minority
 - 77% of Hawaii was minority
 - 60% of New Mexico
 - 60% of California
 - 55% of Texas
 - 65% of the District of Columbia

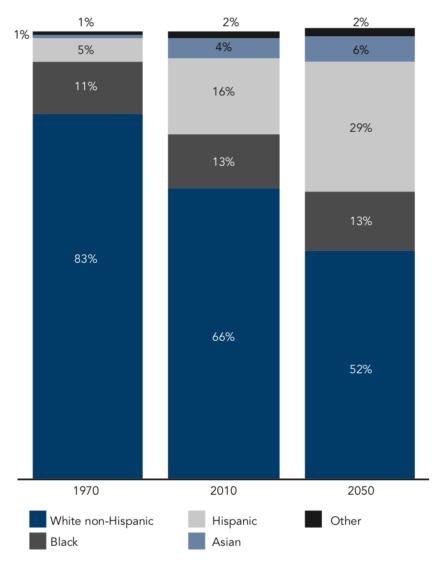


Recent and future patterns

- By around 2044 in the U.S., there will be no race/ethnic numerical majority
 - We will all be minorities
- A Pew Foundation analysis
 - In 2008, a record 14.6% of all new marriages were between spouses of a different race or ethnicity from one another
- The current immigration pattern is not a wave
 - There is a continuing movement of people to the United States from Latin America and from Asia



U.S. Population by Race and Ethnic Group, 1970, 2010, and 2050



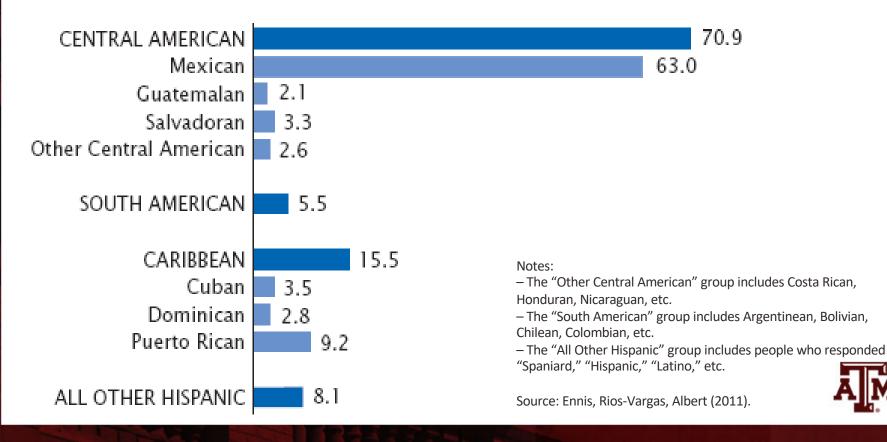
Note: Numbers may not add to 100 percent due to rounding. **Source:** U.S. Census Projections With Constant Net International Migration, accessed at <u>www.census.gov/population/www/projections/2009cnmsSumTabs.html</u>, on June 7, 2010.



Source: Martin, Midgley 2010.

Who are the Hispanics?

 Mexicans, Puerto Ricans, and Cubans, accounted for 75.7% of the U.S. Hispanic population in 2010



Race and immigration

- The major changes in racial and ethnic composition in the U.S. are the result of direct and indirect immigration
 - Immigration has a **direct** effect because the immigrants are added to the population
 - It has an **indirect** effect because the immigrants have children in the host country
- The indirect effect is increasingly important
 - If the immigrants have higher birth rates than the native population
 - This is the case with Hispanics, but not with Asians



Cultural adaptation

- In the United States and elsewhere
 - Some form of adaptation typically begins whenever a new group of immigrants arrives
- At one extreme is **cultural separatism**
 - Newcomers are socially isolated from the residents either through their own volition or through separatist practices of the host society
- At the other extreme is cultural amalgamation
 - A new society and culture result from the massive intermingling and intermarriage between two or more groups



Levels of cultural adaptation

- Between these extreme processes of cultural adaptation are pluralism and the melting pot
- In pluralism, the society allows its constituted ethnic groups to develop, each emphasizing its own cultural heritage
- In the **melting-pot** process, the host and immigrant groups share one another's cultures and, in the process, a new group emerges



Immigrant integration

- Numerous factors must be present if immigrant integration is to succeed
- American society must provide the means to make economic and social advancement possible for all Americans
- Future immigrants must demonstrate their desire to become "one of us," changing the meaning of "us" in the process
- All forms of discrimination must end



Multiracial society

- "Color line" defines black/white relations in the U.S.
- Immigration from recent decades increased diversity in race-ethnicity
- What recent trends in intermarriage and multiracial identification reveal about ethnoracial color lines in contemporary immigrant America?

Data sources

- 2000 U.S. Census and in-depth interview data from multiracial individuals with Asian, Latino or black backgrounds
- Literature review



Source: Lee, Bean 2007; Bean, Lee, Bachmeier 2013.

Intermarriage & multiracial

- Indicators of boundary dissolution
 - Intermarriage happens more often
 - Multiracial identification more common
 - More frequent among immigrants than blacks
- Black exceptionalism
 - Barriers to complete incorporation continue to exist
 - Rates of intermarriage: lower
 - Multiracial identification: lower
 - Residential segregation: higher
 - Educational attainment: lower
 - Health outcomes: worse



Source: Lee, Bean 2007; Bean, Lee, Bachmeier 2013.

Disadvantage persists

- Diversity is helping break down racial barriers
- However, intermarriage and multiracial identification are higher among Asians and Latinos than blacks
- Disadvantage experienced by Asians and Latinos seems to be related to their immigrant background
- Disadvantage experienced by blacks seems to be related to enduring stigma and historical significance of blackness



Source: Lee, Bean 2007; Bean, Lee, Bachmeier 2013.



Black hypersegregation

- Whenever a group is highly segregated along multiple geographic dimensions it is said to be hypersegregated
- Hypersegregation concept
 - Created to describe metropolitan areas in which African Americans were highly segregated
 - On at least four of the five dimensions of segregation
- Authors used census tract data for 287 consistently defined metropolitan areas from 1980 to 2010



Five dimensions

- Unevenness
 - Degree to which blacks and whites are unevenly distributed across neighborhoods in a metropolitan area
- Isolation
 - The extent to which African Americans live in predominantly black neighborhoods
- Clustering
 - The degree to which neighborhoods inhabited by African Americans are clustered together in space
- Concentration
 - The relative amount of physical space occupied by African Americans within a given metropolitan environment
- Centralization
 - The degree to which blacks reside near the center of a metropolitan area



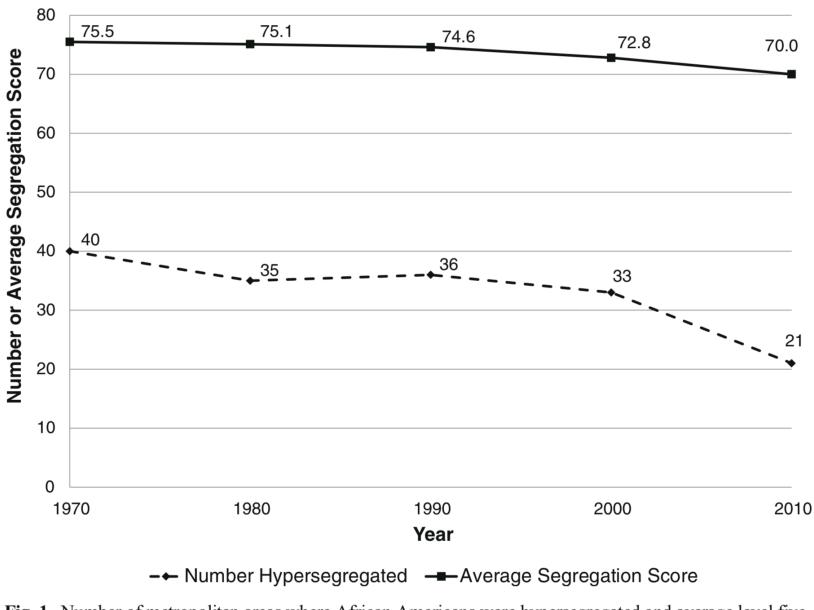
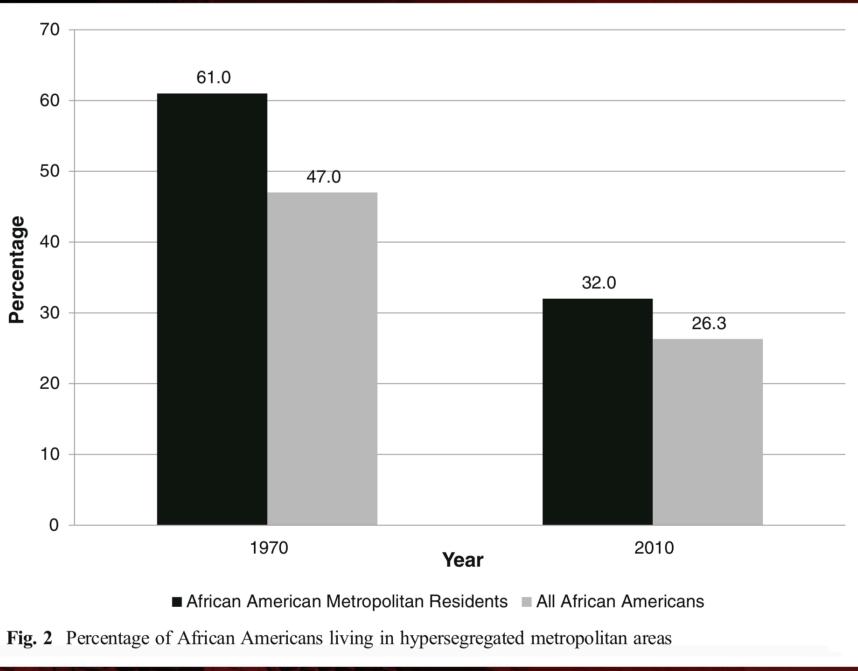


Fig. 1 Number of metropolitan areas where African Americans were hypersegregated and average level fivedimensional segregation

Source: Massey, Tannen 2015.



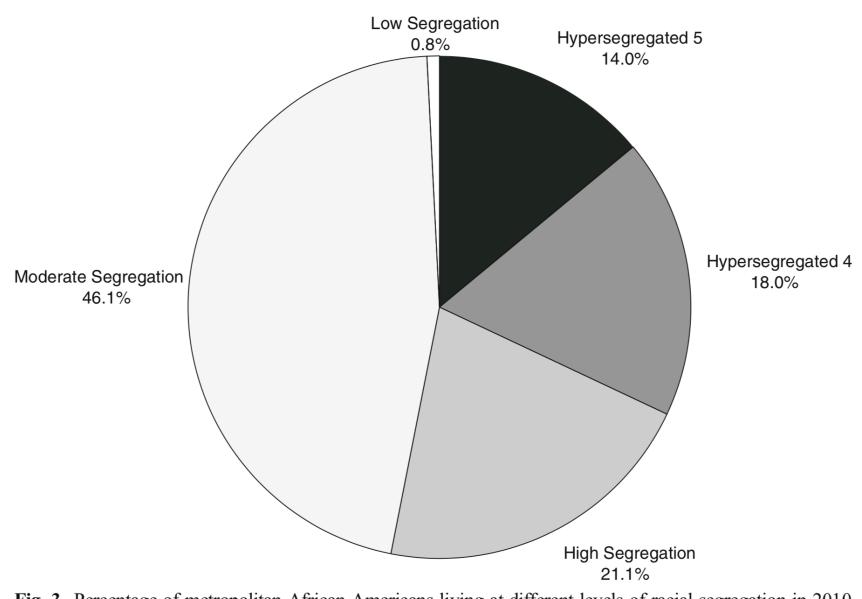
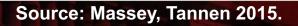


Fig. 3 Percentage of metropolitan African Americans living at different levels of racial segregation in 2010

	Unevenness	Isolation	Clustering	Concentration	Centralization	Average
High Score on All	Five Dimensions	5				
Baltimore	64.3	62.4	62.6	79.1	79.1	69.5
Birmingham	65.2	62.6	78.3	68.3	79.3	70.7
Chicago	75.2	64.8	86.3	79.1	79.6	77.0
Cleveland	72.6	64.7	80.6	85.4	81.9	77.0
Detroit	74.0	70.0	82.6	86.2	74.6	77.5
Flint	67.3	61.7	84.2	80.1	84.1	75.5
Milwaukee	79.6	65.5	100.0	87.1	91.2	84.7
St. Louis	70.6	62.0	75.9	87.3	91.2	77.4
Average	71.1	64.2	81.3	81.6	82.6	76.2
High Score on Four	r Dimensions					
Boston	61.5	31.1	64.8	75.2	79.2	62.4
Chattanooga	63.0	48.6	66.8	78.8	62.6	64.0
Dayton	63.3	55.1	63.4	70.4	76.7	65.8
Gadsden	66.4	47.0	67.2	81.7	81.4	68.7
Hartford	62.3	35.4	80.5	71.1	70.7	64.0
Kansas City	58.6	43.3	52.1	86.5	88.1	65.7
Mobile	59.0	62.2	42.0	68.4	72.6	60.8
Monroe	63.4	66.7	62.6	51.7	71.6	63.2
New York	76.9	51.3	78.6	80.6	83.6	74.2
Philadelphia	67.0	55.8	85.0	69.7	70.0	69.5
Rochester	63.0	40.3	98.9	75.7	78.6	71.3
Syracuse	64.6	37.5	69.0	83.7	87.5	68.5
Winston-Salem	56.1	43.4	55.4	74.8	81.2	62.2
Average	63.5	47.5	68.2	74.5	77.2	66.2

Table 2 Hypersegregated metropolitan areas in 2010



Summary of hypersegregation

- Until 1960s (civil rights era)
 - High segregation was almost universal across U.S. metropolitan areas
- 1970
 - 61% of all black urban population lived in one of 40 hypersegregated metropolitan areas
 - This was nearly 50% of U.S. black population
- 1970 to 2000
 - Hypersegregated areas: decreased from 40 to 21
 - Average segregation within these areas: decreased (75.5 to 70)
- 2010
 - One-third of black metropolitans live in hypersegregation
 - Hypersegregation is centered in a subset of metropolitan areas, containing some of the largest black communities



Inequality of opportunity

- Race/ethnicity and economic opportunity in the United States with an intergenerational perspective
 - Disparities in income using 1989–2015 longitudinal data
- Main results
 - Disparities vary by race/ethnicity
 - Family characteristics and ability don't matter
 - Racial gap persists even among boys who grow up in the same neighborhood
- Recommendations
 - Reducing the black-white income gap will require efforts whose impacts cross neighborhood and class lines and increase upward mobility specifically for black men

https://opportunityinsights.org

<u>https://opportunityinsights.org/paper/race/</u>

https://opportunityinsights.org/wp-content/uploads/2018/04/race_paper.pdf

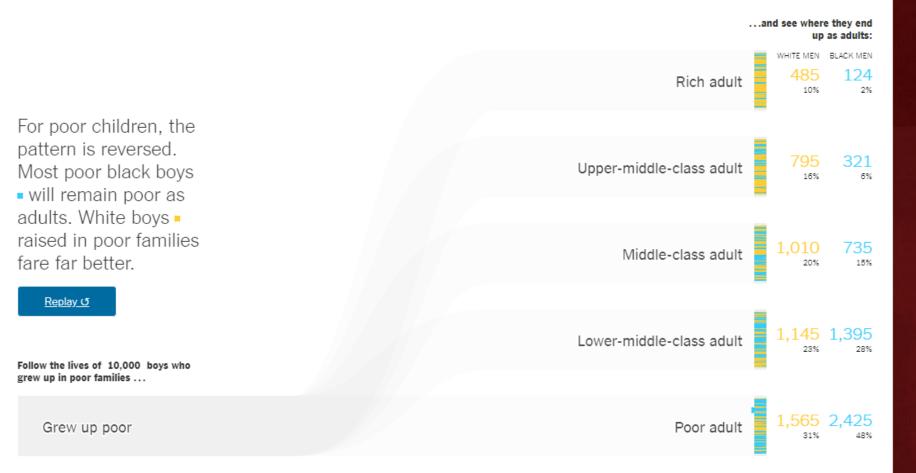
Source: Chetty, Hendren, Jones, Porter (2018).

Boys who grew up rich...

Follow the lives of 10.000 boys who ...and see where they end grew up in rich families up as adults: WHITE MEN BLACK MEN 869 Rich adult Grew up rich 17% 39% 1,220 951 Upper-middle-class adult 19% 24% Most white boys raised in wealthy families will stay rich or upper middle class .089 Middle-class adult 16% 22% as adults, but black boys - raised in similarly rich .016 Lower-middle-class adult households will not. 10% 20% Replay U 075 Poor adult 10% 21%

Adult outcomes reflect household incomes in 2014 and 2015.

Boys who grew up poor...

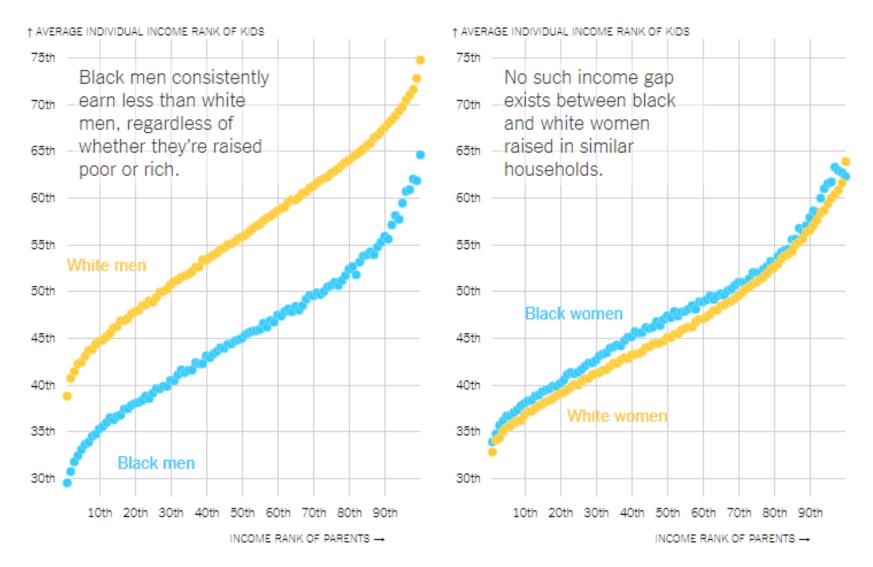


46

Disparities vary by race/ethnicity

- Intergenerational persistence of disparities varies substantially across race/ethnicity groups
- Hispanic Americans are moving up significantly in the income distribution across generations, because they have relatively high rates of intergenerational income mobility
- Black Americans have substantially lower rates of upward mobility and higher rates of downward mobility than whites
 - This leads to large income disparities that persist across generations
- Black-white income gap is driven entirely by large differences in wages and employment rates between black and white men
 - No differences between black and white women

Large income gaps persist between men — but not women.



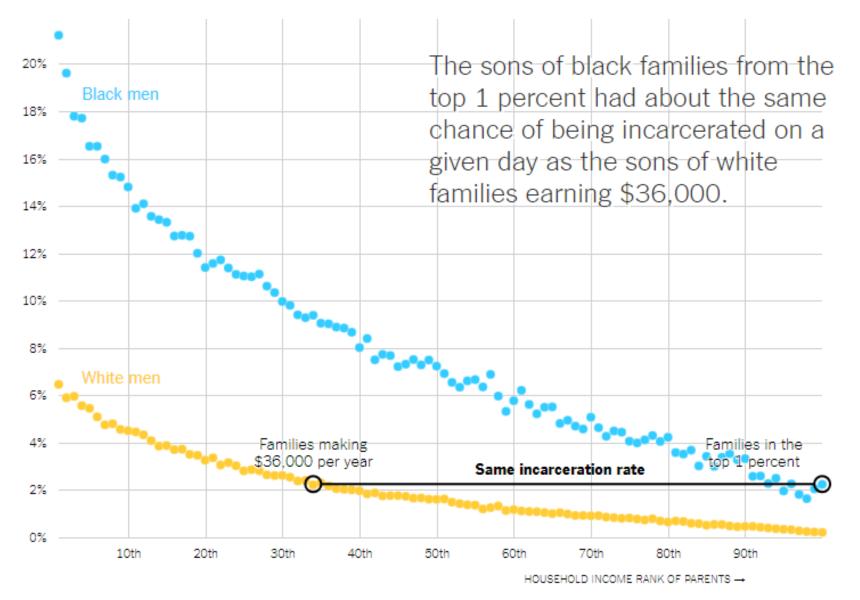
Family characteristics and ability

- Differences in family characteristics explain very little of the black-white income gap conditional on parent income
 - Parental marital status
 - Education
 - Wealth
- Differences in ability also do not explain the patterns of intergenerational mobility

Racial gap and neighborhood

- Black-white gap persists even among boys who grow up in the same neighborhood
 - Black boys have lower incomes in adulthood than white boys in 99% of census tracts
- Both black and white boys have better outcomes in low-poverty areas
 - But black-white gaps are larger on average for boys who grow up in such neighborhoods
- The few areas in which black-white gaps are relatively small tend to be low-poverty neighborhoods with low levels of racial bias among whites and high rates of father presence among blacks
 - Black males who move to such neighborhoods earlier in childhood earn more and are less likely to be incarcerated
 - However, fewer than 5% of black children grow up in such environments

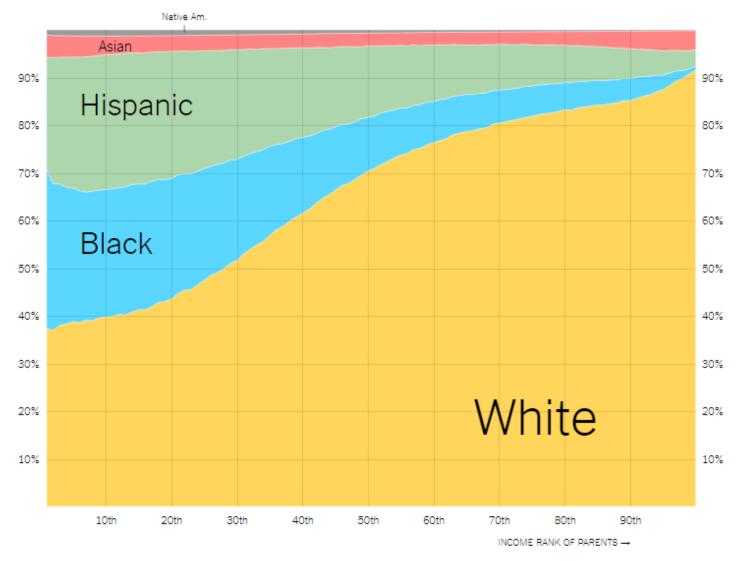
Share of the men incarcerated on April 1, 2010



Includes men who were ages 27 to 32 in 2010.

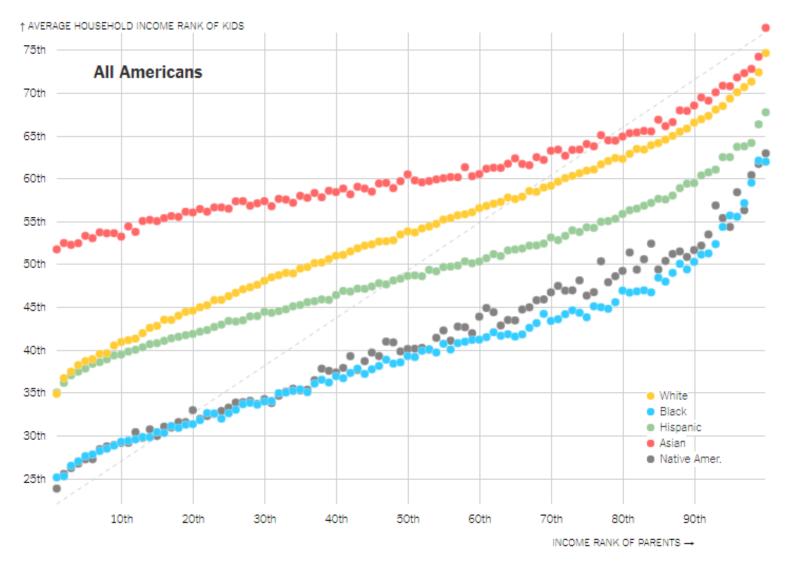
Very few nonwhite Americans started at the very top.

Income distribution of the children in the study



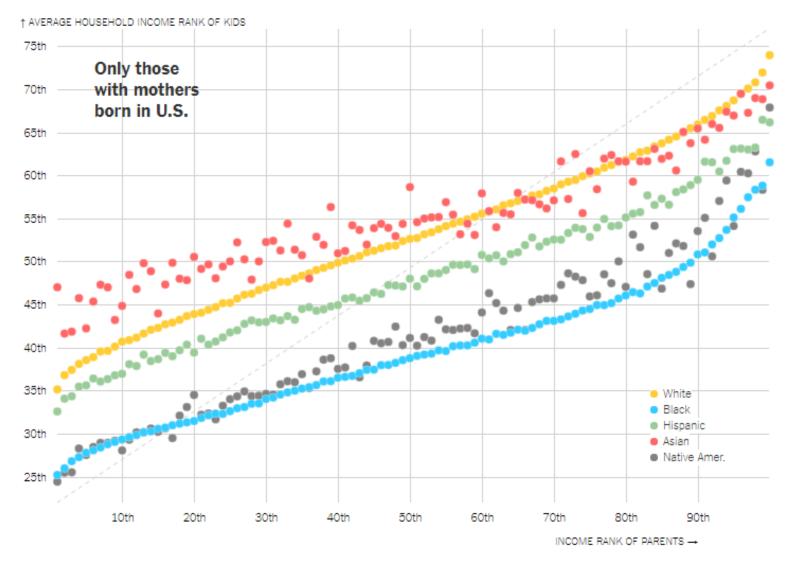
Excludes those reporting multiple races and those for whom no race was identified.

The high mobility rate for Asian-Americans is partly about immigration.



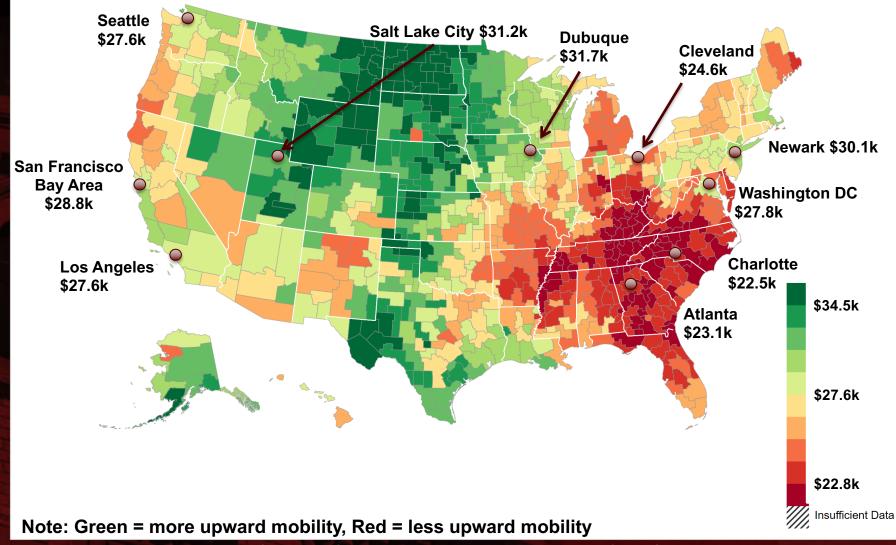
Based on a sample of the children. Few Native Americans have immigrant mothers; their differences in income are not meaningful.

The high mobility rate for Asian-Americans is partly about immigration.



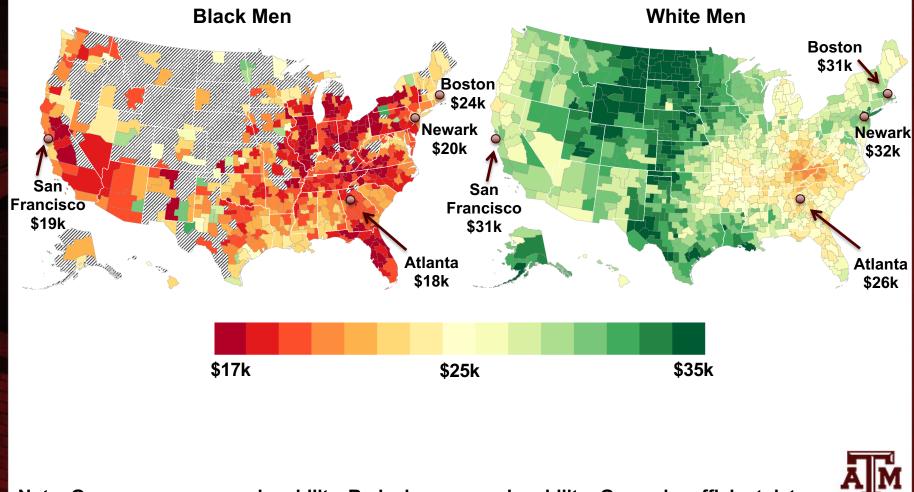
Based on a sample of the children. Few Native Americans have immigrant mothers; their differences in income are not meaningful.

The geography of upward mobility: Average individual income for males with parents earning \$25,000 (25th percentile)



Source: Chetty, Hendren, Jones, Porter (2018).

The geography of upward mobility by race: Average individual income for males with parents earning \$25,000 (25th percentile)



Note: Green = more upward mobility, Red = less upward mobility; Grey = insufficient data

Source: Chetty, Hendren, Jones, Porter (2018).

References

- Bean FD, Lee J, Bachmeier JD. 2013. "Immigration & the color line at the beginning of the 21st century." Daedalus, the Journal of the American Academy of Arts & Sciences, 142(3): 123–140.
- Chetty R, Hendren N, Jones MR, Porter SR. 2018. "Race and economic opportunity in the United States: An intergenerational perspective." Working Paper, March. Funded by the Bill and Melinda Gates Foundation, the Robert Wood Johnson Foundation, the Kellogg Foundation, and Stanford University.
- Lee J, Bean FD. 2007. "Reinventing the color line: Immigration and America's new racial/ethnic divide." Social Forces, 86(2): 561–586.
- Martin P, Midgley E. 2010. "Immigration in America." Population Bulleting Update, Population Reference Bureau, June.
- Massey DS, Tannen J. 2015. "A research note on trends in Black hypersegregation." Demography, 52(3): 1025–1034.
- Perez AD, Hirschman C. 2009b. "The changing racial and ethnic composition of the US population: Emerging American identities." Population and Development Review, 35(1): 1–51.
- Poston DL, Bouvier LF. 2017. Population and Society: An Introduction to Demography New York: Cambridge University Press. 2nd edition. Chapter 11 (pp. 312–331).

