Sen. Elizabeth Warren controversy: Almost every American has a sliver of Native American ancestry



anting to know your ancestry is a powerful motivator that many DNA testing companies such as 23andMe and Ancestry.com have exploited for great profit. But apart from individual curiosity, genetic studies into our ancestry also offer the ability to peer into the history books, offering a DNA time machine, and a unique window into the history of civilized people.

In the largest <u>study</u> of its kind conducted so far, researchers at 23andMe and Harvard University have published the results of a genetic analysis of ancestry among the American people.

The study itself is quite impressive, conducted with 160,000 people who agreed to allow their data to be used anonymously for research purposes when they submitted their DNA for analysis with 23andMe. Such huge sample numbers, which are "an order of magnitude bigger" according to an author of the study, allows for a much more thorough analysis than ever before, helping the authors produce a detailed geographical map of ancestry in the United States. Three major population groups considered in the study: African-Americans, European Americans and Latinos.

Broadly, the genomic analysis found that on an average the African American genome was 73.2 percent African, 24 percent European and 0.8 percent Native American. Latinos as expected had significantly more Native American ancestry with the average Latino genome being 18 percent Native American, 65.1 percent European and 6.2 percent African.

With respect to European Americans, the percentages are much more different than African Americans or Latinos, with European American genomes being 98.6 percent European, 0.19 percent African and 0.18 percent Native American. In general, the numbers seem to agree with what one would expect given the history of American colonization by Europeans and their interactions with African and Native Americans.

It should be noted that these are averages across populations that say nothing about any individual. Any one person could have significant amounts of ancestral DNA from other populations, including ones not captured in these statistics. And increased marriage among ethnic and racial populations will change these numbers over time.

Detailed percentages of ancestry in the various geographical regions showed relatively wide variations in the ancestry which seem to corroborate historical events.

What are the social implications of this study? <u>DNA</u> does not confer identity. The title of Carl Zimmer's *New York Times* article on the research "<u>White? Black? A Murky Distinction Grows Still Murkier</u>," seems to suggest that the genetic data show that racial divides have significantly blurred as populations have mixed

In the United States, there is a long tradition of trying to draw sharp lines between ethnic

groups, but our ancestry is a fluid and complex matter.

"We use these terms — white, black, Indian, Latino — and they don't really mean what we think they mean," said Claudio Saunt, a historian at the University of Georgia who was not involved in the study.

Geneticist Razib Khan, who is of Indian ancestry, has a different view however (emphasis his):

What genetics is showing is that in fact white Americans are shockingly European to an incredibly high degree for a population with roots on this continent for 400 years. If we removed all the history that we take for granted we'd be amazed that the indigenous peoples had so little demographic impact, and, that the larger numbers of people of partial African ancestry did not move into the general "white" population.

Steve Sailer, a long time writer on race and ethnicity, <u>agrees</u> with Khan, with some quick back–of–the envelope calculations to show how...

...whiteness in modern America turns out to be not very murky at all. These findings of 0.19 percent black and 0.18 percent American Indian are tiny numbers.

Think about your family tree back nine generations ago, which would mostly be in the 1700s. You have 512 slots in your family tree nine generations ago (two to the ninth power). The 23andMe numbers suggest that for the average white American, 1 of your 512 ancestors nine generations ago was black and 1 of 512 was Native American.

Here's another way to think of it. If the average self-identified black is 73.2 percent black and the average self-identified white is 0.19 percent black, then the average black in America is 385 times blacker than the average white. That doesn't seem very murky to me.

Editor's note: This article was originally posted on the GLP on January 7, 2015 and is reposted to provide some context to the controversy over Senator Elizabeth Warren's possible American Indian ancestry. This story led the Associated Press to design a graphic, below, which helped reader's in 106 countries that receive the AP feed separate fact fiction.]

Elizabeth Warren's DNA claim inflames some Native Americans

Francois Duckett | Posted: Tuesday, October 16, 2018 6:34 pm

Genetic analysis of the ancestry of 160,000 Americans by Harvard University and 23andMe, the largest such study to date, show averages across three major population groups:

African Americans

Latinos

European Americans It is important to note that the study has several potential biases that should be taken into account such as the socio economic status of those who might have purchased the test and, as Carl Zimmer reported in his piece, the fact that people of mixed race are more likely to take the test out of curiosity. Nevertheless, the large sample size lends unique credibility and the trove of data will no doubt continue to yield very interesting results about how the ethnicity of the current American population came to be.

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For now the interpretation of blurred racial divides might not be quite accurate, and as geneticist Razib Khan <u>points</u> out, it might be a many years before all the genetic and ancestry data can be interpreted with any degree of accuracy. (emphasis his).

But, with the rise in intermarriage and a clearly mixed-race Latino population the lines between the races will become *blurred genetically* more and more. A substantial number of American children today are multiracial, and that fraction looks to increase. If 23andMe did a survey of American genetics 25 years from now **I'd be much more amenable to the** interpretation that the media is putting on this survey.

Arvind Suresh is a science communicator and a former laboratory biologist. Follow him @suresh_arvind

Additional Resources:

- What genes tell us about history, race and ourselves: Christine Kenneally's new book has hits, misses, Genetic Literacy Project
- Proving Native American Ancestry is More Complicated than a DNA Test, Root
- Why some ancestry might not show up in your DNA, Unz Review