Nicholas Alonso and Nicholas Esposito
Professor Kevin Foster
Intro To Econometrics
10/23/2021

Final Project

Non-Hispanic Whites Health: Ancestry's Causation with Disabilities

Abstract

Following the article, we continue the study regarding more recent years on the patterns of racial health differences. The intention of this study is to divide non-Hispanic white adults by different ancestries into separate categories in order to compare health disparities among the non-Hispanic White population. We examine the health status of adults, by utilizing the ACS 2019 Integrated Public Use Microdata Series (IPUMS). Using this data, we inspect racial differentiation in disabilities between non-Hispanic Whites and other races/ethnicities utilizing logistic regression and ordinary least squares regression (OLS) analyses and study whether placing non-Hispanics Whites into subgroups based on ancestry alters the relationship of health disparities. Our study investigates reported disabilities of non-Hispanic white groups compares to the single races. We found a complex relationship between the health disparities between and among racial group, where a clear determination is complicated. One point to note was demographic and socioeconomic covariates have an effect on health disparities since variation in racial categories diminished when incorporating the added variables. The data indicates that not segmenting within the White population and looking at a sole disability outcome is an error since there are observable differences in the health disabilities of Whites.

Introduction

The United States has an increasing diversity in its citizens' races and ethnicities. In the past half-century, there have been decade-long shifts in the origin and migration patterns into the United States. Resulting in a shift away from traditional western European nations has seen a

stream of new immigrants born in Latin America, Africa, and Asia (Waters and Pineau 2015). The movement in immigration increased the vast ethnic diversity and further promoted the ethnic heterogeneity of the United States. “They are also projected to make up a growing proportion of the older population as the mainly White baby boom generation ages and dies off (Lichter 2013)” (Read, Jen’nan Ghazal, et al. 2021). The change of racial heterogeneity has led researchers away from broad approaches in studying health inequalities for universal racial groups like Black, White, and Hispanic. “Studies that disaggregate ethnic subgroups have found considerable variation in the health profiles of groups classified as Hispanic (Almeida et al. 2016; Fenelon et al. 2017; Murillo et al. 2016; Verissimo et al. 2014), Asian (Brown 2016; Cook 2017; Fuller-Thomson et al. 2011; Gee and Ponce 2010; Ro et al. 2015; Yi et al. 2016), and Black (Elo et al. 2011; Hamilton and Hummer 2011; Hamilton 2014; Hamilton and Green 2017; Hendi et al. 2015)” (Read, Jen’nan Ghazal, et al. 2021).

In contrast, there is less extensive research on health disparities of non-Hispanic Whites compared to minority groups. After evaluating articles, studies focusing on differences between racial groups tend to place non-Hispanic Whites into a single population, and rarely test if there are differences among non-Hispanic Whites. “First, assumptions about White health are grounded in a framework that defines Whiteness as a system that privileges persons of western European descent while disadvantaging individuals from other origins (Malat et al. 2018)” (Read, Jen’nan Ghazal, et al. 2021). However, there are other non-Hispanic Whites besides Western Europeans. “Persons who trace their ethnic origins to eastern Europe, North Africa, and the Middle East, including parts of western Asia, are also classified as White and make up an increasing part of the White population as the proportion of western Europeans dwindles (Hixson et al. 2011; Mehta and Elo 2012; Office of Management and Budget 1997)” (Read, Jen’nan

Ghazal, et al. 2021). Thus, depending on the ancestry and migration patterns, different groups within the non-Hispanic White population could have been exposed and susceptible to events that caused health inequities.

The reviewed articles demonstrated some diversity among Whites, calling for a more thorough exploration. This study will use the nationally representative data from the American Community Survey (ACS) (2019). We use the data to separate the non-Hispanic White population based on ancestry to evaluate distinctions in race/ethnicity based on health disabilities. This study focuses on the differentiation among White people of western European, eastern European, Middle Eastern/North African, and North American. These ancestry lineages demonstrate the major groups based on the U.S. Census (Office of Management and Budget 1997). Enabling us to distinguish the health effects of Western Europeans and other White ethnic subgroups, as well the health variances within non-Hispanic Whites relative to Blacks, Asians, and Hispanics.

Background

Over the several last decades, the United States has increasingly become a more diverse nation. Historically, individuals have been segmented into five basic ethnic groups, White; Black; Hispanic; Asian American; and Native American. Unfortunately, this method does not show the distinctions in health of racial/ethnic communities within the five segmented categories. “Between 1970 and 2015, immigrants jumped from 5% to 14% of the population and shifted from being predominantly European origin (75%) to being Latin American (52%) and Asian (30%) origin” (Read, Jen’nan Ghazal, et al. 2021). Creating an ethnic diversity of racial groups with more diversity than any time in the history of the United States. Such is the case with immigration patterns from Asian Americans ranging from China, Russia, and India, each of

which represent a distinct ethnic group with identifiable cultural differences. Most research has not analyzed differences of the non-Hispanic White population, even though non-Hispanic White immigrants have ancestry from North America, Europe, Africa, and Asia.

Solid first 3 pages!

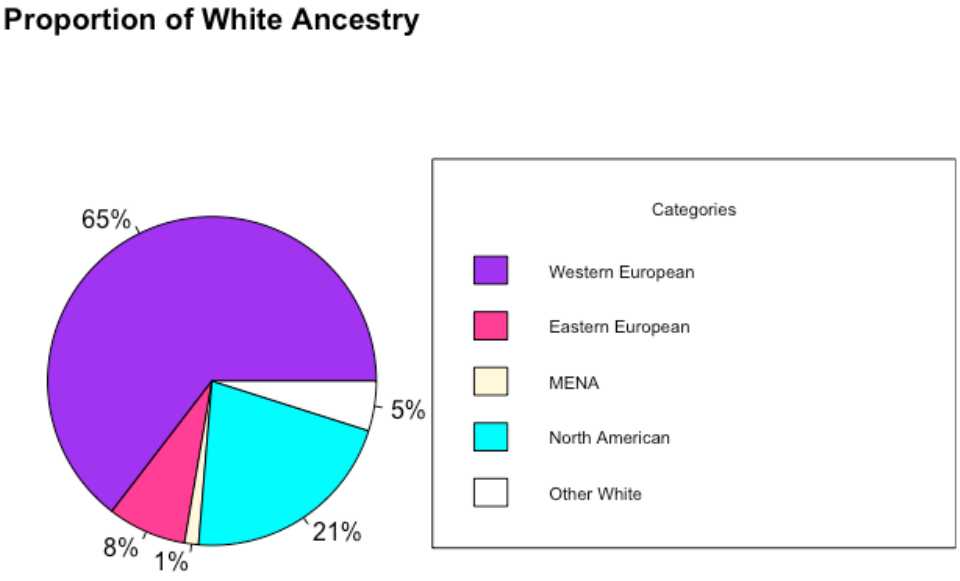
The diversity of races has increasingly become a long-term part of the United States healthcare system, drawing the awareness of researchers and legislators of potential health issues affecting these groups. In some cases, the descriptions originally applied to explain immigrants' health status differ depending on race and ethnicity. "For example, the well-established 'Hispanic paradox' (the unusual combination of good health despite lower socioeconomic status) does not describe patterns for many other groups who arrive in the U.S. with higher levels of economic and social capital" (Akresh and Frank 2008; Mehta and Elo 2012). Indicating there are cases where noticeable health disparities may vary, say between Cubans and Mexicans, where the former has worse overall health outcomes compared to the latter. (Read, Jen'nan Ghazal 2006; Rogers et al. 2000; Vega and Amaro 1994). "Research on Black Americans likewise finds considerable variability in health by nativity and region of birth, with foreign-born Blacks faring better than U.S.-born Blacks [...]" (Hamilton and Hummer 2011; Hamilton and Green 2017). Mainly, studies gather that using large racial groups increases the difficulty of analyzing the health inequalities among ethnic groups due the diversity of ethnic origins inside racial groups.

History of Diversity Among Whites

While many studies have researched the distinctions among minority groups, there are few studies that acknowledge the diversity inside the White community. A thorough review of existing literature found only a single study that coherently separated the health status based on

the ethnicity of non-Hispanic Whites. Additionally, non-Hispanic Whites are traditionally labelled as a uniform reference group when investigating racial and ethnic imbalances. As an illustration, "recent research has examined disparities between Whites and other racial/ethnic groups in areas such as wealth accumulation (Killewald and Bryan 2018), the use of network ties to seek employment" (Silva 2018), and health (Brown 2018; Lippert and Damaske 2018; Shandra 2018)" (Read, Jen'nan Ghazal, et al. 2021). In the case of these studies, together with the annual National Healthcare Quality & Disparities Report (AHRQ 2019), non-Hispanic Whites are the main group that is compared to the additional racial/ethnic categories to evaluate the differences in health.

Figure 0



The immigration patterns have vastly changed over the last several decades yielding a higher heterogeneity among the white non-Hispanic community, where we cannot view them as a homogeneous analogous group (Read and Reynolds 2012; Waters and Pineau 2015). "In 1980, the majority of all persons (226 million) enumerated in the U.S. Census were of Irish, English, and German ancestry (Farley 1991), and most of the foreign-born population was also of western European descent" (Read, Jen'nan Ghazal, et al. 2021). The transformation in immigration origins continued from 1980, where the Irish, English, and German ancestry population has fallen fiercely to one third of total U.S. population and one tenth of those that were not born as a U.S citizen (U.S. Census Bureau 2015). **Therefore, a decline of immigration from Western European nations has led to a fall in the percentage of people with Western European descent.** Percentage change from 1980 through 2016 is roughly 20 percent (Read, Jen'nan Ghazal, et al. 2021). **Comparatively, the migrations patterns of the Eastern European, Middle Eastern and North African non-Hispanic white populations continue to be unwavering. Also, immigrants categorized as "other White & North American" have doubled in population when analyzing the same interval stretch.**

"Changes in the ethnic composition of Whites are tied to larger socio-political and economic contexts globally" (The Integration of Immigrants into American Society 2015). Increasing immigration from eastern Europe, the Middle East and North Africa is noticeable due to civil unrest that arises from political, social, and economic instability. **A divergence exists between western Europeans and Europeans of other ancestry due to intra-state tensions**. For example, "the breakdown of the Former Soviet Union (FSU) contributed to a large influx of FSU immigrants in the late 1980s" (Mehta and Elo 2012), "and political turmoil throughout the Middle East and North Africa has contributed to the Arab population in the U.S. doubling in size

since 1980" (de la Cruz and Brittingham 2003; Jamal and Naber 2008) (Read, Jen'nan Ghazal, et al. 2021). After 9/11, immigrants with ethnic origin from the Middle East and North Africa were the target of negative reception (Bakalian and Bozorgmehr 2009; Jamal and Naber 2008) (Read, Jen'nan Ghazal, et al. 2021).

A nuance of studies has focused on the health disproportion with the goal to gain a greater comprehension of the disparities in the category of White people, where the minor data available has aided in the interpretation of these health disparities. "Much of this work has focused on individuals of Middle Eastern and North African descent and found that patterns in health diverge from those of the average White population across a host of outcomes, including cancer (Bergmans Et al. 2014), chronic disease diagnoses (Dallo and Kindratt 2016), self-rated health (Read and Reynolds 2012), cognitive health (Ajrouch et al. 2017), and disability (Dallo et al. 2009, 2015; Read et al. 2019)" (Read, Jen'nan Ghazal, et al. 2021). **The articles used data to isolate the Eastern Europeans from the larger White designation and indicated that Eastern Europeans had below average health conditions.** "The author provides an example from the Former Soviet Union where immigrants report higher levels of disability than U.S.-born Whites even though they have higher levels of educational attainment (Mehta and Elo 2012)" (Read, Jen'nan Ghazal, et al. 2021).

The two writings discuss the significance of disability as an indicator of health inequalities (Shandra 2018) among foreign migrant groups.

> In particular, when a country or region experiences prolonged periods of unrest and instability, it effects whether and what type of work is available, the degree of access to adequate nutrition, clean water, and medical care, as well as increased exposures to

toxins and environmental hazards, all of which could compromise mobility and functional health.

(Levy and Sidel 2013) (Read, Jen'nan Ghazal, et al. 2021)

In the climate of the U.S, those with disabilities suffer limitations in a multitude of aspects (Erickson et al. 2018) "and has implications for stigma, discrimination, and status attainment (e.g., employment)" (Ameri et al. 2017; Green et al. 2005) (Read, Jen'nan Ghazal, et al. 2021).

There have only been minimal extensive studies into the disparity of health among the U.S. White population. Isolation of the White category group as a homogeneous bulk designation could lead to misrepresentation of health conditions among Whites and the differentiation of racial groups by averaging probable and substantial differences among Whites of diverse origins. This bulk approach of classification could possibly skew results when comparing Whites to other racial ethnic groups. We will be using Integrated Public Use Microdata Series (IPUMS 2019) to examine three questions: whether there are interracial health disparities between non-Hispanic Whites and other racial ethnic groups. Next, we will analyze White subgroup classifications to determine any subsequent disparities within the bulk homogeneous category. Finally, we will inspect to what extent distinctions in social demographic attributes relate to observed health disparities.

Methods

Sample

We will be expanding on previous literature journals using data from the one-year file of 2019 from Public Use Microdata Sample (IPUMS). The Microdata sample includes households and persons from the 1% weighted ACS Sample from 2019. The IPUMS 2019 data was chosen because in our analysis the material will provide a segmented category breakdown of the specific

racial/ethnic groups for evaluation. Our study will analyze those who are non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, and Hispanic, and individuals that are greater than 45 years old due to the fact that health complications start showing around the selected age range (Martin and Schoeni 2014). The IPUMS USA data is a weighted sample, therefore our analysis is representative of the United States population.

Measures

We will be using 5 dependent variables in our analysis, taken from the 5 questions that are asked about different types of disabilities within each household. The survey questions ask about the following disabilities: self-care (showering); independent living (inability to perform daily tasks); cognitive functions (learning, mental recollection and decision making); vision (has diminished sight or strain to see); and hearing (deaf or strain to hear). The responses in the data for the five questions above are annotated with (0 = no, 1 = yes) to differentiate individuals. We inspect the five disabilities individually because they identify different aspects of health and functioning (Altman et al. 2017).

The focus of interest in our study and interest is race and ethnicity, where we examine the White, Black, or African American, Asian, and other racial groups. While with ethnicity the IPUMS has subcategorized respondents as Hispanic, Latino or Spanish origin when the response was "yes = 1" to Hispanic descent. In our analysis, we have created dummy variables for the following major ethnic groups: White, Black, Hispanic, Asian, and other Races. Additionally, we further diverged the major racial/ethnic groups into subgroup categories of ancestry. Next, we separated Whites by their response to "ANCESTR1" into 5 distinct classes of Western European, Eastern European, Middle Eastern and North African (MENA region), North American, and Other Whites (2.5% of respondents). "Hereafter, we refer to these groups as western European,

eastern European, [...], MENA, North American, and other White" (Read, Jen'nan Ghazal, et al. 2021). "**We likewise used U.S. Census classification categories to disaggregate non-Hispanic Blacks (North American, African, West Indian, European, Central/South American, other Blacks); non-Hispanic Asians (Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese, other Asian); and Hispanics (Mexican, Puerto Rican, Central American, South American, Cuban, other Hispanic)"** (Read, Jen'nan Ghazal, et al. 2021).

Furthermore, we estimate the scope to which compositional distinctions contribute to health complications in regard to racial/ethnic categories since studies demonstrate differences in demographic, socioeconomic, and immigrant traits (Olshansky et al. 2012; Read et al. 2019, 2020; Vierboom et al. 2019). So, in our analysis we utilize demographic, socioeconomic and immigrant attributes. For the demographic attributes we test age (how many years old) and sex (male = 1 or female = 2). Marital status is defined and computed as married, separated/divorced, widowed, or never married/single. The regions are computed as dummy variables for Northeastern, Midwestern, Southern regions against the Western region. For socioeconomic attributes we test two dummy variables. The first is education attainment, where we grouped by less than high school (no schooling to 12th grade with no diploma), high school degree (high school graduate or GED, regular High School Diploma, GED, or alternative credential), some college (some college, but less than 1 year, up to 4 years of college but no conferral of Bachelors), and a college degree or more (includes a bachelor's or higher). The second dummy variable is regarding health insurance, where we code for those without health insurance. Lastly, we incorporate two measures that impact health in immigrant groups. We will be using the data to create a dummy variable for non-citizens; while the other variable is on English language

proficiency and comprehension, compared to the people who have limited or no understanding of the English language.

Analytical Strategy

To explore our data set, we will conduct a couple analyses. We start by running logit models for the five health disabilities detailed above, utilizing dummy variables with respect to the major racial/ethnic classes and for the created ancestry subclasses (23 dummies). We have concluded that two models will be of the most interest. In Model 1, we will look at just the racial categories and subcategories. In Model 2, we will incorporate all additional dummy variables to have a broad scope of the health conditions affecting the categories. Model 1 returns a diverse assortment of health outcomes between major racial classes, and the racial/ethnic/ancestral subclasses respectively. In Model 2, we assess the impact of age, the second polynomial of age, sex, socioeconomic disparities, and other factors with respect to disabilities. From other studies, we assume there may be a miniscule link between age and sex, to show differences inside racial groups.

To finalize our analysis, we observe the five generated White ancestry subclasses to evaluate how those of Western European ancestry differ from the rest of the White ancestry subgroups. We also use logistic regression in this model for the five health disabilities to test using just the White ancestry, while other models test White ancestry and all the added variables. The results display the most relevant models and graphs, all additional models will be found in the appendix section.

Results

Our summary statistical table for those over 40 years old presents traits for the four main racial groups, and the five subgroup ancestry categories. The sample statistics for the additional

racial categories are available in the appendix **[Appendix pg.22]**. The data revealed in most cases that Blacks have a higher proportion of disability when compared to White. Blacks with an independent living disability (14.2%) are higher in proportion when compared to Whites (13.2%). However, those with independent living disabilities that are Asian (7.7%) and Hispanic (9.8%) are a lower proportion compared to Whites. Additionally, when looking at those with a self-care disability, we see similar results: Blacks (9.4%) are greater than Whites (8.8%) while Asians and Hispanics make up 4.3% and 6.1% respectively which may suggest a higher level of autonomy. The summary statistics for the White ancestry subclasses demonstrate the Other White subgroup has the highest proportion of individuals in all disability categories, while the remaining White categories vary depending on the specific disability. For example, the White Eastern European category has the second proportion out of the ancestry groups regarding those with a hearing disability (8.4%). While the White North American category has the second largest proportion of people with a self-care disability (6.0%). Moving on, socioeconomic differences exist inside the major White racial group, as we can note by observing the White ancestry categories. In the White ancestry subgroup, Western Europeans and Other Whites have a higher proportion of women, while North Americans tend to consist of more men. Regionally, the Western Europeans and Other White subgroups are more concentrated in the South compared to the rest of the ancestry sub-groups. In regard to education, those of Western European Ancestry have a substantial number of individuals that lack a high school education (33%). Also, the White Western European category had a considerable number of individuals with no insurance coverage ($\mu = 0.139$). The rate of material status of the White ancestry subgroups is comparable (~ 62.4%). Finally, those of Western European ancestry are more likely to be linguistically isolated and possess a lack of citizenship.

We begin analyzing regressions by evaluating the health disparities based on the five disabilities in the main racial groups. The *Figure 1* expresses the summaries of the logistic regressions, while *Figure 2* shows the graphical coefficients for logistic regressions based on the main racial groups. *Figure 1* uses Model 1, which is composed of the major racial groups testing against the dependent variables (the five types of disabilities). While *Figure 3* (Appendix pg.29-30) uses Model 2, which includes all additional covariates and *Figures 4-8 (*Appendix pg.30-33) express their graphical coefficients. The coefficient graphs, as well as with the summary output, we see a similar pattern. In *Figures 1 and 2*, for the majority of regressions, Blacks tend to show higher coefficients for disabilities compared to Whites, indicating that Blacks have a greater probability to be disabled, followed by Hispanics, Whites, then Asians. The one exception is regarding hearing disabilities, where Whites have the most elevated coefficients, followed by Hispanics, Blacks than Asians. Now in the *Figure 3 and Figures 4-8 (*Appendix pg.30-33), includes all the covariates. We can note that in *Figure 3 and Figures 4-8 (*Appendix pg.30-33), with added independent variables, the variation between racial categories in regard to health disabilities diminishes. We know this because the spread of the coefficients is reduced, thus the main racial

Figure 1

Model 1, Major Racial Groups

	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
White	-0.096**	-0.130***	-0.317***	-0.290***	-0.005
	(0.043)	(0.033)	(0.036)	(0.046)	(0.040)
Black	0.396***	0.286***	0.171***	0.191***	-0.568***
	(0.048)	(0.038)	(0.042)	(0.053)	(0.050)

Asian	-0.501***	-0.460***	-0.801***	-0.844***	-0.814***
	(0.062)	(0.048)	(0.055)	(0.075)	(0.060)
Hispanic	-0.108***	-0.130***	-0.155***	0.087**	-0.514***
	(0.032)	(0.025)	(0.029)	(0.035)	(0.031)
Constant	-2.762***	-2.173***	-2.304***	-2.982***	-2.424***
	(0.043)	(0.033)	(0.036)	(0.046)	(0.040)
Observations	262,025	262,025	262,025	262,025	262,025
Log Likelihood	-56,205.350	-80,649.180	-66,128.830	-42,589.940	-67,820.560
Akaike Inf. Crit.	112,420.700	161,308.400	132,267.700	85,189.890	135,651.100
Note:					*p**p***p<0.01

groups get closer to each other. **We deduce gross racial differences tend to be smaller, suggesting that demographic and socioeconomic factors explain a portion of the racial disparity in health.** Although there are some exceptions, for example, when looking at vision Hispanics have a poorer health outcome than Blacks or when looking at hearing Blacks have the least probability of susceptibility to poor hearing. Nonetheless, the rest of the results display similar output to typical research that explore variation in health, where minority groups like Blacks and Hispanics, tend to have poorer health compared to Whites.

Figure 2

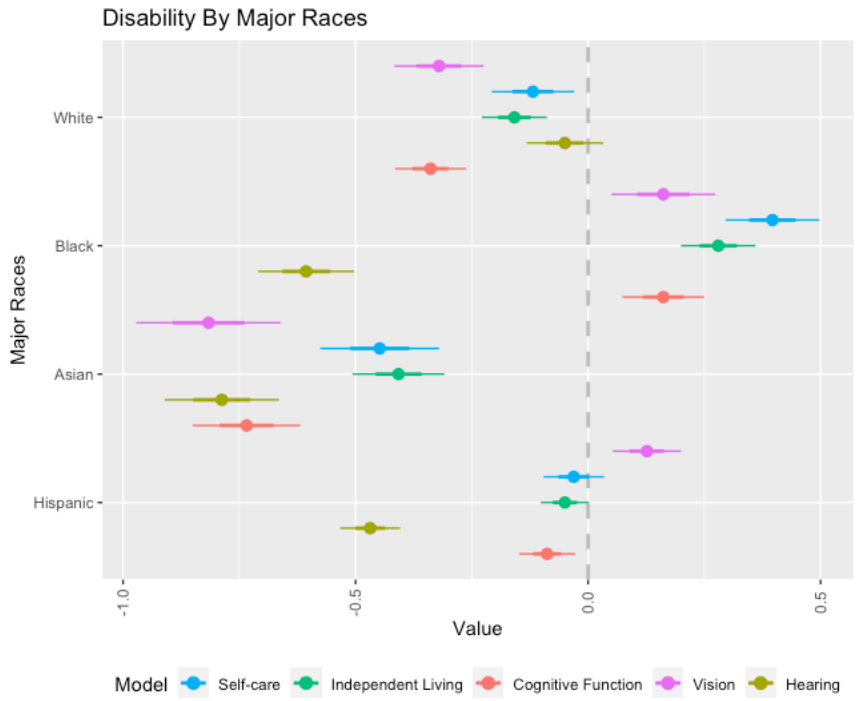


Figure 3

Model 2, Major Racial Groups with Covariant

	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
White	-0.223***	-0.246***	-0.282***	-0.355***	-0.266***
	(0.046)	(0.037)	(0.038)	(0.047)	(0.043)
Black	0.105**	-0.025	-0.145***	-0.061	-0.799***
	(0.052)	(0.042)	(0.044)	(0.056)	(0.053)
Asian	-0.302***	-0.260***	-0.479***	-0.643***	-0.725***
	(0.068)	(0.053)	(0.059)	(0.078)	(0.064)
Hispanic	-0.062*	-0.141***	-0.257***	0.049	-0.324***
	(0.037)	(0.030)	(0.032)	(0.040)	(0.036)
AGE	-0.078***	-0.128***	-0.130***	-0.046***	0.018***
	(0.006)	(0.005)	(0.005)	(0.007)	(0.006)
I(AGE2)	0.001***	0.001***	0.001***	0.001***	0.0004***
	(0.00004)	(0.00004)	(0.00004)	(0.00005)	(0.00004)
SEX	0.019	0.159***	-0.045***	-0.084***	-0.792***
	(0.019)	(0.015)	(0.017)	(0.022)	(0.017)

Married	-1.357***	-1.363***	-1.425***	-0.700***	-0.119***
	(0.027)	(0.022)	(0.023)	(0.033)	(0.031)
Seperated_Divorced	-0.609***	-0.634***	-0.535***	-0.108***	0.079**
	(0.030)	(0.025)	(0.025)	(0.036)	(0.035)
Widowed	-0.771***	-0.764***	-0.777***	-0.221***	0.064*
	(0.033)	(0.028)	(0.030)	(0.041)	(0.036)
Northeast	-0.077***	-0.090***	-0.140***	-0.209***	-0.253***
	(0.029)	(0.024)	(0.027)	(0.036)	(0.027)
Midwest	-0.058**	-0.047**	-0.042*	-0.100***	-0.107***
	(0.029)	(0.023)	(0.025)	(0.033)	(0.025)
South	-0.015	0.033	0.024	0.138***	0.036*
	(0.025)	(0.021)	(0.022)	(0.028)	(0.022)
HS	-0.506***	-0.556***	-0.606***	-0.393***	-0.283***
	(0.025)	(0.021)	(0.022)	(0.029)	(0.025)
Some_college	-0.776***	-0.891***	-0.960***	-0.610***	-0.312***
	(0.028)	(0.023)	(0.024)	(0.032)	(0.026)
Bachelor_Higher	-1.327***	-1.481***	-1.576***	-1.091***	-0.722***
	(0.031)	(0.025)	(0.028)	(0.035)	(0.027)
No_Insurance	-0.780***	-0.694***	-0.345***	0.132***	-0.044
	(0.059)	(0.043)	(0.038)	(0.046)	(0.047)
Linguistic_Isolation	-0.153***	-0.077*	-0.094*	0.026	-0.217***
	(0.056)	(0.044)	(0.050)	(0.060)	(0.055)
Not_Citizen	-0.415***	-0.418***	-0.784***	-0.405***	-0.416***
	(0.060)	(0.046)	(0.055)	(0.063)	(0.059)
Constant	-0.587***	1.534***	2.643***	-1.686***	-3.711***
	(0.207)	(0.164)	(0.164)	(0.227)	(0.211)
Observations	262,025	262,025	262,025	262,025	262,025
Log Likelihood	-47,143.950	-66,158.570	-58,611.990	-39,369.960	-57,872.470
Akaike Inf. Crit.	94,327.900	132,357.100	117,264.000	78,779.930	115,784.900

Note: *p**p***p<0.01

Figure 9 and *Figure 10* (Appendix pg. 34-36) show the heterogeneity in ancestral disability that is omitted by utilizing the main racial groupings, while *Figures 11-15* (Appendix pg. 35-37) and *Figures 16-20* (Appendix pg. 38-40) express their graphical coefficients respectively. The figures demonstrate the proportional coefficients of all the created ancestral categories based on disabilities. Western European through Other Whites will include Whites of different ancestry. North America through Other Black will include Blacks of different ancestry. Chinese to Japanese will include all those Asians with an ancestry of Asian. And the Mexican to Other Hispanic will group all individuals with a Hispanic ancestry. The five determined health measures are listed on the headers of *Figures 11-15* (Appendix pg. 35-37). *Figure 9* is the first Model with no controls, where *Figures 11-15* shows the graphical coefficients. While *Figure 10* is controlled with the demographic and socioeconomic factors, where *Figures 16-20* (Appendix pg. 38-40) shows the graphical coefficients. The subgroups of ancestry that have a positive value larger than 0 are more likely to have a disability. Those that are scored with a larger negative value are more likely to not have a disability. A complete table can be found below in the form of Stargazer *Figure 9.*

We attempt to make comparisons on *Figure 9* and *Figures 11-15* to determine aspects of ancestral health disparities. Since most figures have overlapping disparities, this indicates a strong heterogeneity between and within racial subgroups. Where the interracial health disparities tend to be greater than the interracial health disparities. For the most part, Black Central South Americans have the least likelihood of disabilities, while Black Europeans have the highest likelihood of disabilities. But when observing the **Self Care disability**, Black North Americans have the only positive significant coefficient out of all the subgroups. Additionally, other Hispanics have the highest coefficients for most disabilities, but in the case of hearing

disabilities, Japanese and North American Whites have a higher coefficient than the other Hispanics. While the White and Asian subgroups tend to have less disabilities compared to Blacks and Hispanics, variation still exists within all subgroups. Moving on, we evaluate *Figure 10* (Appendix pg. 34-36) and *Figures 16-20* (Appendix pg. 38-40) which include the additional demographic and socioeconomic factors. Similar to the previous Model 2, the variance of the coefficients of the racial/ethnic ancestral subgroups diminishes due to the added covariates. Observations of health disparities are found in all disability cases; particularly within the White and Black groups there are more examples of disparities as compared to Asian and Hispanic ancestry subgroups.

Figure 9

Logit Model 1, All Ancestry Subgroups No Covariates

	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
Western_Europeans_White	-0.662***	-0.520***	-0.639***	-0.396***	-0.022
	(0.023)	(0.018)	(0.020)	(0.027)	(0.020)
Eastern_Europeans_White	-0.672***	-0.526***	-0.734***	-0.482***	-0.190***
	(0.048)	(0.037)	(0.045)	(0.057)	(0.039)
Middle_Eastern_North_African_White	-0.356***	-0.405***	-0.828***	-0.549***	-0.746***
	(0.109)	(0.090)	(0.121)	(0.153)	(0.127)
North_American_White	-0.120***	-0.049**	-0.064***	-0.040	0.122***
	(0.028)	(0.022)	(0.025)	(0.034)	(0.025)
Other_White	-0.442***	-0.344***	-0.248***	-0.211***	-0.090*
	(0.058)	(0.045)	(0.049)	(0.067)	(0.049)
Black_NorthAmerican	0.211***	0.214***	0.228***	0.296***	-0.535***
	(0.032)	(0.026)	(0.029)	(0.039)	(0.040)
Black_African	-0.373***	-0.354***	-0.366***	-0.124	-1.200***
	(0.118)	(0.095)	(0.106)	(0.135)	(0.167)
Black_WestIndian	-0.314**	-0.436***	-0.509***	-0.250	-1.447***

	(0.123)	(0.106)	(0.122)	(0.153)	(0.203)
Black_Central_South_American	-1.657	-1.427**	-1.172	-1.113	-1.710*
	(1.008)	(0.718)	(0.719)	(1.008)	(1.008)
Black_European	0.294	0.240	0.146	0.418	-0.276
	(0.293)	(0.249)	(0.283)	(0.346)	(0.365)
Other_Black	-0.014	-0.260	-0.240	0.421*	-0.355
	(0.228)	(0.207)	(0.228)	(0.239)	(0.258)
Asian_Chinese	-0.922***	-0.758***	-1.042***	-1.154***	-0.870***
	(0.097)	(0.073)	(0.092)	(0.140)	(0.092)
Filipino	-1.031***	-0.611***	-0.813***	-0.608***	-0.684***
	(0.118)	(0.079)	(0.096)	(0.125)	(0.099)
Indian	-1.163***	-0.950***	-1.479***	-1.276***	-1.234***
	(0.133)	(0.097)	(0.138)	(0.182)	(0.134)
Vietnamese	-0.600***	-0.451***	-0.493***	-0.437***	-0.797***
	(0.131)	(0.099)	(0.113)	(0.156)	(0.140)
Korean	-0.516***	-0.671***	-0.781***	-0.881***	-1.092***
	(0.142)	(0.123)	(0.144)	(0.216)	(0.180)
Japanese	-0.185	-0.353***	-0.528***	-0.284	0.074
	(0.138)	(0.121)	(0.145)	(0.184)	(0.121)
Mexican	-0.518***	-0.460***	-0.503***	-0.042	-0.442***
	(0.042)	(0.033)	(0.037)	(0.044)	(0.039)
Puerto_Rican	-0.077	0.116*	0.089	0.253***	-0.473***
	(0.078)	(0.059)	(0.066)	(0.086)	(0.089)
Cuban	0.012	-0.058	-0.081	-0.026	-0.462***
	(0.095)	(0.080)	(0.090)	(0.122)	(0.113)
Central_American_Hispanic	-0.856***	-0.800***	-0.631***	-0.359***	-1.192***
	(0.118)	(0.092)	(0.096)	(0.121)	(0.134)
South_American_Hispanic	-1.200***	-0.887***	-1.058***	-0.551***	-0.986***
	(0.145)	(0.100)	(0.122)	(0.138)	(0.126)
Other_Hispanic	0.323***	0.325***	0.395***	0.382***	-0.020
	(0.096)	(0.080)	(0.085)	(0.116)	(0.106)
Constant	-2.486***	-2.007***	-2.262***	-3.030***	-2.433***
	(0.016)	(0.013)	(0.015)	(0.021)	(0.016)
Observations	262,025	262,025	262,025	262,025	262,025
Log Likelihood	-55,598.680	-79,984.290	-65,390.390	-42,437.900	-67,725.380

Akaike Inf. Crit.	111,245.400	160,016.600	130,828.800	84,923.800	135,498.800

Note: *p**p***p<0.01

A specific case where the Black racial groups show how Black Central South Americans still tend to occupy the lowest rate of disabilities, yet the Black Europeans tend to have the highest rate of disabilities when comparing all ancestral groups. The White Eastern Europeans have the least likelihood of a cognitive function disability, where other Whites have the highest likelihood of a cognitive function disability within the White ancestral group. Thus, demonstrating for both the cases of Black and White groups how health differences exist within them. As for the other races, the Hispanic ancestral sub-groups show conflicting results in the case of the cognitive function disability. Where we find other Hispanics are much more likely to have disabilities compared to Southern American Hispanics. Even the Asian subgroup, which has the least amount of variation, still has health disparities that exist within them. Therefore, the extreme cases of non-constancy of coefficients in health disabilities within and among ancestral/racial groups, leads to the determination that comparisons of subgroups are exceedingly difficult.

Figure 21 presents the logit coefficients and *Figure 22* shows the graphical coefficients of solely the White ancestry group. While *Figure 23* (Appendix pg. 41) presents the logit coefficients of solely the White ancestry group, which is controlled by the demographic and socioeconomic factors. Figure 22 presents the results of Fig. 3 as odds ratios, rather than logit coefficients, and restricts the display to White ancestry groups only. The *Figures 21 and 22* show the logit coefficients based on the five dependent variables (self-care, independent living, cognitive function, vision, and hearing). In some cases, North Americans tend to have the highest rate of disability, followed by Other Whites, then MENA, then Western Europeans and lastly

Eastern Europeans, which appear to be the healthiest. However, the order of disabilities previously mentioned is not always consistent. In the case of vision disabilities, the MENA have a lower coefficient indicating that there is a lower rate of disability compared to Western and Eastern Europeans. An important empirical observation shows the diversity in disability outcomes within the White ancestry group. Furthermore, people with the same ancestry have significant differences with their disabilities as well. For instance, the case of Western Europeans has the logit coefficient of -0.539 for self-care disability, yet for hearing disability has the coefficient of 0.243. For the most part, our data exhibits differences in the health disability amidst the White ancestry groups as well as significant heterogeneity in regard to the health disparities exanimated. Similar to previous regression, in *Figure 23* when incorporating demographic and socioeconomic covariates gross racial differences tend to be smaller, added variables explain a portion of the racial disparity in health. The data indicates that not segmenting within the White population and looking at a sole disability outcome is an error since there are

observable differences in the health disabilities of Whites.

Figure 22

Logit Model 2, All Ancestry Subgroups and Covariates

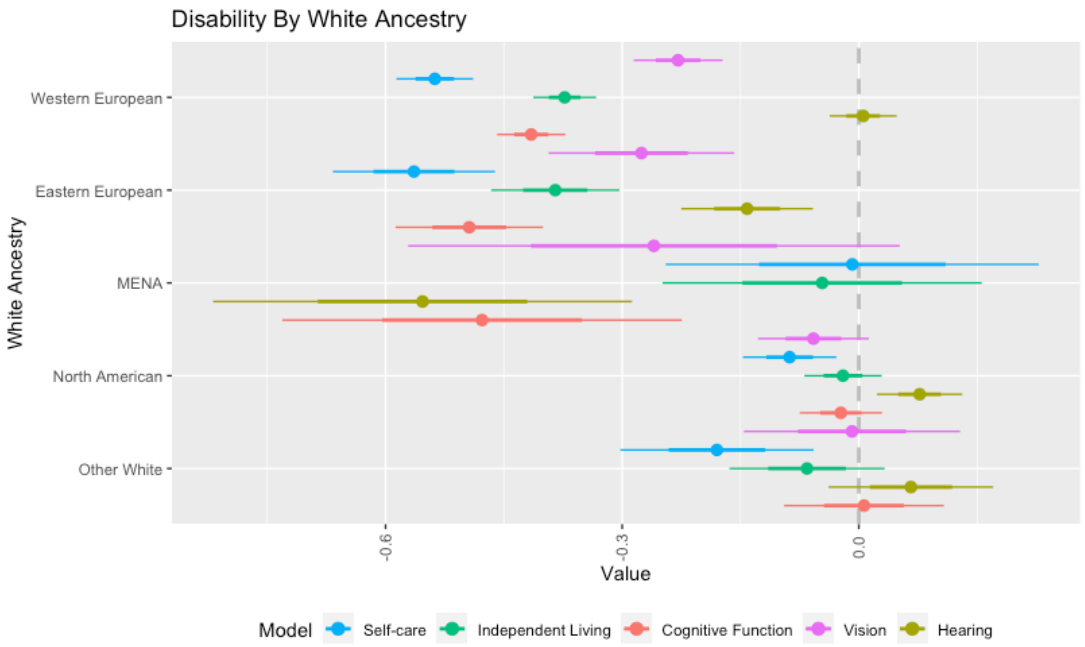
	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
Western_Europeans_White	-0.538***	-0.373***	-0.415***	-0.229***	0.006
	(0.024)	(0.020)	(0.022)	(0.028)	(0.021)
Eastern_Europeans_White	-0.564***	-0.385***	-0.494***	-0.276***	-0.142***
	(0.051)	(0.041)	(0.047)	(0.059)	(0.042)
Middle_Eastern_North_African_White	-0.008	-0.046	-0.478***	-0.260*	-0.553***

	(0.118)	(0.101)	(0.127)	(0.156)	(0.133)
North_American_White	-0.088***	-0.020	-0.023	-0.058	0.077***
	(0.030)	(0.025)	(0.026)	(0.035)	(0.027)
Other_White	-0.180***	-0.066	0.007	-0.009	0.066
	(0.061)	(0.049)	(0.051)	(0.069)	(0.052)
Black_NorthAmerican	0.144***	0.128***	0.029	0.196***	-0.516***
	(0.035)	(0.029)	(0.031)	(0.040)	(0.042)
Black_African	0.062	0.057	-0.136	0.144	-0.781***
	(0.123)	(0.101)	(0.110)	(0.137)	(0.171)
Black_WestIndian	-0.301**	-0.468***	-0.504***	-0.163	-1.257***
	(0.133)	(0.116)	(0.127)	(0.157)	(0.208)
Black_Central_South_American	-1.862*	-1.675**	-1.237*	-1.012	-1.681
	(1.048)	(0.783)	(0.743)	(1.021)	(1.038)
Black_European	0.284	0.212	0.010	0.447	-0.026
	(0.310)	(0.267)	(0.294)	(0.353)	(0.388)
Other_Black	0.114	-0.217	-0.369	0.465*	-0.022
	(0.240)	(0.220)	(0.235)	(0.244)	(0.272)
Asian_Chinese	-0.587***	-0.441***	-0.656***	-0.847***	-0.563***
	(0.105)	(0.082)	(0.098)	(0.144)	(0.099)
Filipino	-0.613***	-0.152*	-0.329***	-0.204	-0.300***
	(0.125)	(0.086)	(0.101)	(0.128)	(0.104)
Indian	-0.305**	-0.085	-0.647***	-0.588***	-0.633***
	(0.138)	(0.103)	(0.142)	(0.184)	(0.138)
Vietnamese	-0.352**	-0.269**	-0.346***	-0.316**	-0.542***
	(0.140)	(0.109)	(0.119)	(0.161)	(0.147)
Korean	-0.163	-0.374***	-0.396***	-0.599***	-0.832***
	(0.156)	(0.138)	(0.153)	(0.221)	(0.190)
Japanese	-0.356**	-0.567***	-0.482***	-0.280	-0.054
	(0.151)	(0.137)	(0.154)	(0.190)	(0.131)
Mexican	-0.303***	-0.326***	-0.483***	0.011	-0.152***
	(0.047)	(0.038)	(0.042)	(0.049)	(0.044)
Puerto_Rican	-0.062	0.145**	-0.013	0.300***	-0.270***
	(0.084)	(0.066)	(0.070)	(0.089)	(0.095)
Cuban	-0.073	-0.214**	-0.139	-0.232*	-0.606***
	(0.106)	(0.093)	(0.097)	(0.128)	(0.122)
Central_American_Hispanic	-0.550***	-0.603***	-0.524***	-0.222*	-0.686***

	(0.125)	(0.100)	(0.101)	(0.125)	(0.139)
South_American_Hispanic	-0.823***	-0.549***	-0.701***	-0.274*	-0.564***
	(0.152)	(0.109)	(0.127)	(0.141)	(0.131)
Other_Hispanic	0.213**	0.195**	0.201**	0.232*	-0.042
	(0.104)	(0.089)	(0.091)	(0.120)	(0.113)
AGE	-0.074***	-0.126***	-0.126***	-0.044***	0.017***
	(0.006)	(0.005)	(0.005)	(0.007)	(0.006)
I(AGE2)	0.001***	0.001***	0.001***	0.001***	0.0004***
	(0.00004)	(0.00004)	(0.00004)	(0.00005)	(0.00004)
SEX	0.016	0.159***	-0.049***	-0.085***	-0.794***
	(0.019)	(0.015)	(0.017)	(0.022)	(0.017)
Married	-1.329***	-1.343***	-1.401***	-0.693***	-0.112***
	(0.028)	(0.022)	(0.023)	(0.033)	(0.031)
Seperated_Divorced	-0.601***	-0.629***	-0.528***	-0.105***	0.083**
	(0.030)	(0.025)	(0.025)	(0.036)	(0.035)
Widowed	-0.757***	-0.757***	-0.765***	-0.220***	0.068*
	(0.033)	(0.028)	(0.030)	(0.041)	(0.036)
Northeast	-0.043	-0.084***	-0.128***	-0.198***	-0.236***
	(0.030)	(0.025)	(0.027)	(0.036)	(0.027)
Midwest	-0.057**	-0.059**	-0.049*	-0.108***	-0.103***
	(0.029)	(0.023)	(0.025)	(0.034)	(0.025)
South	-0.068***	-0.021	-0.037*	0.112***	0.026
	(0.026)	(0.021)	(0.022)	(0.029)	(0.022)
HS	-0.476***	-0.535***	-0.582***	-0.388***	-0.277***
	(0.025)	(0.021)	(0.022)	(0.029)	(0.025)
Some_college	-0.702***	-0.839***	-0.900***	-0.588***	-0.299***
	(0.028)	(0.023)	(0.024)	(0.032)	(0.026)
Bachelor_Higher	-1.228***	-1.412***	-1.488***	-1.059***	-0.699***
	(0.031)	(0.025)	(0.028)	(0.036)	(0.028)
No_Insurance	-0.778***	-0.689***	-0.337***	0.138***	-0.040
	(0.059)	(0.043)	(0.038)	(0.046)	(0.047)
Linguistic_Isolation	-0.138**	-0.044	-0.078	0.072	-0.154***
	(0.057)	(0.045)	(0.051)	(0.061)	(0.056)
Not_Citizen	-0.334***	-0.325***	-0.680***	-0.332***	-0.392***
	(0.060)	(0.047)	(0.056)	(0.063)	(0.059)
Constant	-0.724***	1.369***	2.429***	-1.953***	-3.967***

	(0.204)	(0.162)	(0.161)	(0.224)	(0.208)
Observations	262,025	262,025	262,025	262,025	262,025
Log Likelihood	-46,814.970	-65,871.870	-58,319.360	-39,333.480	-57,851.480
Akaike Inf. Crit.	93,707.940	131,821.700	116,716.700	78,744.960	115,781.000
Note:					*p**p***p<0.01

Figure 22



This graph is ALL ANCESTRIAL GROUPS, however we only restrict our view-to-white racial group. ancestry, with demographics

Limitations

In our study, the size of sample is a limitation because the sample is uses 15 percent of the ACS IPUMS data from the year 2019, which may not accurately reflect individuals in each ethnic and ancestral category. Additionally, random sampling uses to create subsample could produce bias since random observations are not weighted. For example, in the previous study "*Disaggregating Heterogeneity among Non-Hispanic Whites: Evidence and Implications for*

U.S. Racial/Ethnic Health Disparities" those originating from Slovenian are about 8% they percentage of Slovenians are not 8% and are unsure if whether the skew is due to random sampling, the lack of weighting samples or changed naturally alterations in population patterns due to potential immigration transitions, or natality. Moving on, out analyses does not consist of poverty levels because interpretation of the recorded factor was undeterminable. **Additionally, those labeled as foreign born and non-citizenship are not utilized as a demographic variable in our study due to coding difficulties, thus it will not be used as a determining factor.** Furthermore, we decided to exclude the second model in their study, which was a model included racial groups and only the variable for age (as well as its polynomial term) and sex, since we already combined those variables with the other demographic and socioeconomic variables in our second model. Next, our study is not a time series, we collect data from a single year, whereas the previous study uses data from approximately 9 years, therefore the lack of additional years may cause bias. **Additionally, available referenceable databases regarding intra-racial white diversification are limited, where historical censuses have generally been recorded decennially and have only recently been published on a yearly basis in the ACS** (Read 2013). Utilizing the ACS dataset from 2019, we have the ability to segment by ancestry the uniform white racial group to inspect variation inside the overall White ethnic population. Unfortunately, the dataset does not provide historical material on parents reported ancestral origin, causing insufficiencies when looking at fluctuations from newer to old generations. Looking at disabilities in this dataset is hard because the answers are recorded in a yes/no format, and do not elaborate to the extent of the disability. An interesting study would be to use other variables, such as a self-reported health data, with respect to race/ethnicity and ancestry to

contrast inconsistencies against disabilities (Read and Reynolds 2012) and observations collected in the ACS.

Discussion and Conclusion

Whites have traditionally been the main racial group compared to other racial groups when investigating health differences in the United States to quantify variation in well-being when contrasting the majority population against racial/ethnic minority groups. We find this to be consistent research when looking at comparisons between Whites and other large racial/ethnic groupings, as well as in more recent studies that have concentrated on inequalities within the non-Hispanic White class. **The method of using Whites as a singular homogenous group neglects a number of significant demographic developments; using Whites as a reference group has complications. By 2040, whites are expected to be a minority group, so there is less purpose in using them as a reference group in population health studies, especially if health policies are influenced by other substantially bigger racial groups (Coleman 2006; Lichter 2013).** White ethnic composition has shifted substantially since the 1965 Immigration and Nationality Act and is no longer as homogeneous as commonly imagined. As a result, analyzing Whites as a whole obscures health disparities not only among Whites, **as well as between Whites and other races and ethnicities.**

This analysis investigated the hypothesis that not segmenting within the White population and looking at a sole disability outcome is an error since there are observable differences in health inequalities of Whites. By assessing the level of internal variability within White ancestry groups and comparing health developments among Whites to other large races and ethnicities. The findings call into question the widely held belief that Whites are a monolithic population. In several areas, health outcomes are observed to be more diverse among Whites than among

Whites and representative individuals of other racial/ethnic groups when separating based on ancestry. The level of variety in disability among the White ancestry categories was also significant, demonstrating that the gross White category is insufficient for reflecting the health results of White people.

Page 22 white ancestry group…..

When comparing our study to "Disaggregating Heterogeneity among Non-Hispanic Whites: Evidence and Implications for U.S. Racial/Ethnic Health Disparities", we found in the summary statistics a change in the sex distribution from previous White Western Europeans and Other White, these groups having a higher proportion of women while White North Americans tend to be more male. In the analysis conducted by the authors (Read, Jen'nan Ghazal, et al), the North American and other White categories are also more heavily composed of females. Another interesting change from previous studies done was that the mean age for all White Ancestry has increased which could be affected by the baby boomer generation continuing their aging trend. We observed that not only White Ancestry

As mentioned before, differences in main racial groups have been evaluated in numerous studies. As can be seen in the graphs in this study, the logit coefficients for each racial group are listed as White, Black, Asian, and Hispanic respectively, showing the major health disparities in main racial ethnic groups. The confidence interval for black central south Americans is especially large which might be to a small sample size.

Educational attainment differs in our study compared to original study by GHALA

Regressions

Using different years than the article we are using

The percentages are a bit lower for ethnic groups than reported by google scholar

Additional group from American Indian, we did add them because they are small group

As we in the current year, the north Americans may have less disability, back looking at more years than there were more disabilities in other white, where we find north American have a higher rate of disability, ware are looking at a single ,therefore what we find in one year, may be different from ten year. In previous study, other whites were worse off than the north American counterparts.

This is a very important area of study since white will be a minority group, if trend of immigration patterns continues, baseline studies will be less representative of interracial groups since whites are minority.

Ultimately will submit a project (the written document, with relevant graphs and tables), as well as supplementary material including electronic versions of readings, output files generated by R, and your dataset (if it's not one of the ones I've given you). We should download all the articles (check!).

Get other footnotes from google docx

Foot not immigration and nationality act 1965, put in discussion

Opportunity cost, people may want to be disabled

Speculate in the discussion

Add ols models can we use models for just white ancestry groups.

Download plots and upload all of them to github

Add in paper that we are using both logistic and linear regression

Change models in paper to those where all ancestry, socioeconomic and demographic variables

"Individuals with disabilities experience lower education levels, lower employment rates, fewer household resources, and poorer health than people without disabilities. Yet, despite comprising more than one-eighth of the US population, people with disabilities are seldom integrated into sociological studies of inequality."(Sandra 2018)

Shandra, C. L. (2018). Disability as inequality: Social disparities, health disparities, and participation in daily activities. Social Forces, 97(1), 157–192.

"Adults with disabilities spend less time than adults without disabilities in market work and more time in tertiary activities and leisure. There is no difference in nonmarket time. Health accounts for the largest percentage of the explained component of tertiary time differences, but depending on the choice of predictors, sociodemographic characteristics account for as much—or more—of the explained component of differences in market and leisure time."(Sandra 2018)

Shandra, C. L. (2018). Disability as inequality: Social disparities, health disparities, and participation in daily activities. Social Forces, 97(1), 157–192.

"Research suggests that Mexican immigrants arrive in the United States with equivalent or better health than native-born whites but lose their advantage over time."

Reynolds, M. M., Chernenko, A., & Read, J. G. (2016). Region of origin diversity in immigrant health: Moving beyond the Mexican case. Social Science & Medicine, 166, 102–109

Immigrants have better health profiles than U.S counterparts despite social economic disadvantages and suffering from discrimination potentially because Americans are unhealthy smoke, drink, and live sedentary lifestyle, eat a lot of red meat. use cars and not public transportation shop more online. Because immigrants want better lifestyle, thus they will not claim to be sick with disabilities.
3 reasons – origin culture lower stress, only healthy individuals will migrate, and errors in reporting and collecting data if self-reporting health may not want to identify as disabled.
Akresh, I. R., & Frank, R. (2008). Health selection among new immigrants. American Journal of Public Health, 98(11), 2058–2064.

Self-care disabilities for black European, other black and other Hispanic have higher rates of disability potentially because of discrimination.
Almeida, J., Biello, K. B., Pedraza, F., Wintner, S., & Viruell-Fuentes, E. (2016). The association between anti-immigrant policies and perceived discrimination among Latinos in the US: A multi- level analysis.

People that identified as disabled received disability insurance from the government!

Altman, Barbara M. "An Evaluation of the American Community Survey Indicators of Disability." Disability and Health Journal., vol. 10, no. 4, Elsevier Science, 2017, pp. 485–91, https://doi.org/10.1016/j.dhjo.2017.03.002.

People with disabilities are less likely to get hired.

Ameri, M., Schur, L., Adya, M., Bentley, S., McKay, P., & Kruse, D. (2017). The disability employment puzzle: A field experiment on employer hiring behavior. ILR Review, 71(2), 329–364.

"Racial and ethnic groups vary in their mortality chances. Persons in higher educational, income, and occupational groupings have a survival advantage over those in lower socioeconomic groupings."

Rogers, R. G., Hummer, R. A., & Nam, C. B. (2000). Living and dying in the USA: Behavioral health, and social differentials in adult mortality. San Diego, CA: Academic Press.

compared with US-born whites, white immigrants have a persistent health advantage, while black and Mexican American immigrants experience a health disadvantage that increases with age.

Brown, T. H. (2018). Racial stratification, immigration, and health inequality: A life course-intersectional approach. Social Forces, 96(4), 1507–1540

"Immigration is central to our understanding of U.S. racial and ethnic health disparities, yet relatively little is known about the health of white immigrants – a group whose ethnic origins have become increasingly diverse. To the extent that whites are included in social stratification research, they are typically used as the reference category for gauging health inequities, with little attention to diversity among them. This study addresses this question using nationally representative data from the American Community Survey (2008–2017). We disaggregate non-Hispanic whites by nativity, region of birth, and period of arrival in the U.S. and examine differences in physical disability among adults aged 40 and older (n = 12, 075, 638). The analysis finds that foreign-born whites have a slightly lower prevalence of disability than U.S.-born whites, and this varies by arrival cohort. Immigrants who arrived in the 1981–1990 and 1991–2000 cohorts have a smaller advantage over U.S.-born whites than immigrants in the earlier and later cohorts. Compositional changes in the region of birth of white immigrants, especially the influx of eastern Europeans and Middle Easterners during the 1980s and 1990s, explained this variation. These findings challenge the oft-assumed notion that

whites are a monolithic group and highlight growing intra-ethnic heterogeneity that is obscured by the aggregate category. Our findings also suggest that the standard practice of using whites as the reference for benchmarking health inequities may mask health inequities not only among them, but also between whites and other racial and ethnic populations."

Read, J. G., West, J. S., & Kamis, C. (2020). Immigration and health among non-Hispanic Whites: The impact of arrival cohort and region of birth. Social Science & Medicine, 246, 112754

"Mexican and Middle Eastern immigrants are healthier than U.S.-born whites, and men report better health than women regardless of nativity or ethnicity. We identify utilization of health care as a primary mechanism that contributes to both patterns. Immigrants are less likely than U.S.-born whites to interact with the health care system, and women are more likely to do so than men. Thus, immigrant and gender health disparities may partly reflect knowledge of health status rather than actual health."
Read, J. G., & Reynolds, M. M. (2012). Gender differences in immigrant health: The case of Mexican and Middle Eastern immigrants. Journal of Health and Social Behavior, 53(1), 99–123.

Black and arab more likely to report disability, while Hispanic and arab are less likely to report.
Dallo, F. J., Booza, J., & Nguyen, N. D. (2015). Functional limitations and nativity status among older Arab, Asian, Black, Hispanic, and White Americans. Journal of Immigrant and Minority Health, 17(2), 535–542.

Opportunity cost
"The foreign-born health advantage was most evident among the least-educated except among immigrants from Europe/Canada, who also reported the highest levels of disability among the foreign-born."
Elo, I. T., Mehta, N. K., & Huang, C. (2011). Disability among native-born and foreign-born Blacks in the United States. Demography, 48(1), 241–265.

Grouping Asians in one group obscures variability in disparities.

Fuller-Thomson, Esme, et al. “Comparison of Disability Rates among Older Adults in Aggregated and Separate Asian American/Pacific Islander Subpopulations.” American Journal of Public Health, vol. 101, no. 1, Jan. 2011, pp. 94–100. EBSCOhost, doi:10.2105/AJPH.2009.176784.

Change text where we look at solely the white ancestry groups in figure 23 and use figure 22 to say we restrict the display just, although the graph is still influenced by all the other variables

When changing model to be influenced by all other ancestral racial groups, it appears other whites have the highest rate of disability! Same as original paper!

For analytic strategy we will do 2 models, we use main racial groups and all ancestry of main

racial groups with demographics and socio-economic factors.

We need original IPUMS data to put on github

Upload all articles in github

Library

https://web-s-ebscohost-com.ccny-proxy1.libr.ccny.cuny.edu/ehost/search/advanced?vid=10&sid=2f08e178-bc12-4321-b591-c1dea28b9103%40redis

Attach link s when submitting data used

IPUMS Data

https://usa.ipums.org/usa-action/data_requests/download

https://live.usa.datadownload.ipums.org/web/extracts/usa/1692160/usa_00001.cbk

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Appendix

	White (N=40957)	Black (N=22544)	Asian (N=13450)	Hispanic (N=7547)	White W European Ancestry (N=17052)	White E European Ancestry (N=102847)	White MENA Ancestry (N=12429)	White N American Ancestry (N=1637)	Other White (N=30577)	Overall (N=262025)
Disability Self-Care										
FALSE	37664 (92.0%)	20593 (91.3%)	12954 (96.3%)	7157 (94.8%)	16186 (94.9%)	98611 (95.9%)	11925 (95.9%)	1548 (94.6%)	28483 (93.2%)	247390 (94.4%)
TRUE	3293 (8.0%)	1951 (8.7%)	496 (3.7%)	390 (5.2%)	866 (5.1%)	4236 (4.1%)	504 (4.1%)	89 (5.4%)	2094 (6.8%)	14635 (5.6%)
Disability Independent Living										
FALSE	35968 (87.8%)	19570 (86.8%)	12549 (93.3%)	6914 (91.6%)	15627 (91.6%)	95234 (92.6%)	11518 (92.7%)	1504 (91.9%)	27122 (88.7%)	237728 (90.7%)
TRUE	4989 (12.2%)	2974 (13.2%)	901 (6.7%)	633 (8.4%)	1425 (8.4%)	7613 (7.4%)	911 (7.3%)	133 (8.1%)	3455 (11.3%)	24297 (9.3%)
Disability Cognitive Thinking										
FALSE	37016 (90.4%)	20153 (89.4%)	12875 (95.7%)	7018 (93.0%)	16004 (93.9%)	97483 (94.8%)	11838 (95.2%)	1566 (95.7%)	27863 (91.1%)	243683 (93.0%)
TRUE	3941 (9.6%)	2391 (10.6%)	575 (4.3%)	529 (7.0%)	1048 (6.1%)	5364 (5.2%)	591 (4.8%)	71 (4.3%)	2714 (8.9%)	18342 (7.0%)
Disability Vision										
FALSE	39122 (95.5%)	21240 (94.2%)	13167 (97.9%)	7208 (95.5%)	16327 (95.7%)	99596 (96.8%)	12065 (97.1%)	1593 (97.3%)	29226 (95.6%)	251924 (96.1%)
TRUE	1835 (4.5%)	1304 (5.8%)	283 (2.1%)	339 (4.5%)	725 (4.3%)	3251 (3.2%)	364 (2.9%)	44 (2.7%)	1351 (4.4%)	10101 (3.9%)
Disability Hearing										
FALSE	37455 (91.4%)	21476 (95.3%)	12945 (96.2%)	7190 (95.3%)	16201 (95.0%)	94733 (92.1%)	11590 (93.2%)	1571 (96.0%)	27828 (91.0%)	242965 (92.7%)
TRUE	3502 (8.6%)	1068 (4.7%)	505 (3.8%)	357 (4.7%)	851 (5.0%)	8114 (7.9%)	839 (6.8%)	66 (4.0%)	2749 (9.0%)	19060 (7.3%)
AGE										
Mean (SD)	61.6 (13.6)	59.9 (12.3)	57.9 (12.6)	55.3 (11.6)	57.3 (12.5)	62.6 (12.4)	62.5 (12.8)	59.0 (12.8)	62.2 (12.7)	61.2 (12.8)
Median [Min, Max]	60.0 [40.0, 96.0]	59.0 [40.0, 95.0]	56.0 [40.0, 95.0]	53.0 [40.0, 95.0]	55.0 [40.0, 95.0]	62.0 [40.0, 96.0]	62.0 [40.0, 96.0]	57.0 [40.0, 95.0]	62.0 [40.0, 96.0]	60.0 [40.0, 96.0]
SEX										
Mean (SD)	1.52 (0.499)	1.55 (0.497)	1.56 (0.496)	1.52 (0.500)	1.53 (0.499)	1.52 (0.500)	1.53 (0.499)	1.47 (0.499)	1.53 (0.499)	1.53 (0.499)
Median [Min, Max]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	1.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]
Married										
Mean (SD)	0.606 (0.489)	0.408 (0.492)	0.750 (0.433)	0.592 (0.492)	0.621 (0.485)	0.665 (0.472)	0.665 (0.472)	0.712 (0.453)	0.632 (0.482)	0.627 (0.484)
Median [Min, Max]	1.00 [0, 1.00]	0 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]
Seperated/Divorced										
Mean (SD)	0.170 (0.376)	0.237 (0.425)	0.0920 (0.289)	0.184 (0.387)	0.177 (0.382)	0.156 (0.362)	0.148 (0.355)	0.130 (0.336)	0.174 (0.379)	0.167 (0.373)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Widowed										
Mean (SD)	0.123 (0.329)	0.110 (0.313)	0.0771 (0.267)	0.0645 (0.246)	0.0745 (0.263)	0.0966 (0.295)	0.0989 (0.299)	0.0825 (0.275)	0.110 (0.313)	0.0996 (0.299)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Never Married/Single										
Mean (SD)	0.100 (0.300)	0.245 (0.430)	0.0809 (0.273)	0.160 (0.366)	0.128 (0.334)	0.0827 (0.275)	0.0879 (0.283)	0.0764 (0.266)	0.0828 (0.276)	0.106 (0.308)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Northeast Region										
Yes	6493 (15.9%)	3428 (15.2%)	2566 (19.1%)	1266 (16.8%)	1743 (10.2%)	21926 (21.3%)	3886 (31.3%)	355 (21.7%)	3570 (11.7%)	47097 (18.0%)
No	34464 (84.1%)	19116 (84.8%)	10884 (80.9%)	6281 (83.2%)	15309 (89.8%)	80921 (78.7%)	8543 (68.7%)	1282 (78.3%)	27007 (88.3%)	214928 (82.0%)
Midwest Region										
Yes	10162 (24.8%)	3503 (15.5%)	1097 (8.2%)	552 (7.3%)	1085 (6.4%)	27229 (26.5%)	3646 (29.3%)	258 (15.8%)	6291 (20.6%)	56268 (21.5%)
No	30795 (75.2%)	19041 (84.5%)	12353 (91.8%)	6995 (92.7%)	15967 (93.6%)	75618 (73.5%)	8783 (70.7%)	1379 (84.2%)	24286 (79.4%)	205757 (78.5%)
South Region										
Yes	16673 (40.7%)	13604 (60.3%)	2857 (21.2%)	1917 (25.4%)	7924 (46.5%)	32786 (31.9%)	2784 (22.4%)	424 (25.9%)	15803 (51.7%)	99682 (38.0%)
No	24284 (59.3%)	8940 (39.7%)	10593 (78.8%)	5630 (74.6%)	9128 (53.5%)	70061 (68.1%)	9645 (77.6%)	1213 (74.1%)	14774 (48.3%)	162343 (62.0%)
West Region										
Yes	7629 (18.6%)	2009 (8.9%)	6930 (51.5%)	3812 (50.5%)	6300 (36.9%)	20906 (20.3%)	2113 (17.0%)	600 (36.7%)	4913 (16.1%)	58978 (22.5%)
No	33328 (81.4%)	20535 (91.1%)	6520 (48.5%)	3735 (49.5%)	10752 (63.1%)	81941 (79.7%)	10316 (83.0%)	1037 (63.3%)	25664 (83.9%)	203047 (77.5%)
Less Than High School Diploma										
Yes	4427 (10.8%)	3592 (15.9%)	2029 (15.1%)	3091 (41.0%)	5431 (31.8%)	5000 (4.9%)	542 (4.4%)	182 (11.1%)	3660 (12.0%)	29275 (11.2%)
No	36530 (89.2%)	18952 (84.1%)	11421 (84.9%)	4456 (59.0%)	11621 (68.2%)	97847 (95.1%)	11887 (95.6%)	1455 (88.9%)	26917 (88.0%)	232750 (88.8%)
High School Diploma										
Yes	13992 (34.2%)	7168 (31.8%)	2201 (16.4%)	2036 (27.0%)	4418 (25.9%)	26192 (25.5%)	3058 (24.6%)	282 (17.2%)	11357 (37.1%)	74200 (28.3%)
No	26965 (65.8%)	15376 (68.2%)	11249 (83.6%)	5511 (73.0%)	12634 (74.1%)	76655 (74.5%)	9371 (75.4%)	1355 (82.8%)	19220 (62.9%)	187825 (71.7%)
Some College/Associates Degree										
Yes	10975 (26.8%)	6939 (30.8%)	2511 (18.7%)	1557 (20.6%)	4004 (23.5%)	32004 (31.1%)	3382 (27.2%)	340 (20.8%)	8647 (28.3%)	74424 (28.4%)
No	29982 (73.2%)	15605 (69.2%)	10939 (81.3%)	5990 (79.4%)	13048 (76.5%)	70843 (68.9%)	9047 (72.8%)	1297 (79.2%)	21930 (71.7%)	187601 (71.6%)
Bachelor's Degree or Higher										
Yes	11563 (28.2%)	4845 (21.5%)	6709 (49.9%)	863 (11.4%)	3199 (18.8%)	39651 (38.6%)	5447 (43.8%)	833 (50.9%)	6913 (22.6%)	84126 (32.1%)
No	29394 (71.8%)	17699 (78.5%)	6741 (50.1%)	6684 (88.6%)	13853 (81.2%)	63196 (61.4%)	6982 (56.2%)	804 (49.1%)	23664 (77.4%)	177899 (67.9%)
No Health Inusrance										
Mean (SD)	0.0528 (0.224)	0.0871 (0.282)	0.0526 (0.223)	0.189 (0.392)	0.160 (0.367)	0.0349 (0.184)	0.0316 (0.175)	0.0611 (0.240)	0.0603 (0.238)	0.0606 (0.239)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Limited English Proficiency										
Mean (SD)	0.00435 (0.0658)	0.00980 (0.0985)	0.174 (0.379)	0.155 (0.362)	0.154 (0.361)	0.00350 (0.0591)	0.0374 (0.190)	0.127 (0.333)	0.00206 (0.0453)	0.0302 (0.171)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Not a U.S. Citizen										
Mean (SD)	0.00850 (0.0918)	0.0293 (0.169)	0.207 (0.405)	0.306 (0.461)	0.233 (0.423)	0.0116 (0.107)	0.0267 (0.161)	0.130 (0.336)	0.00752 (0.0864)	0.0470 (0.212)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]

Figure 4

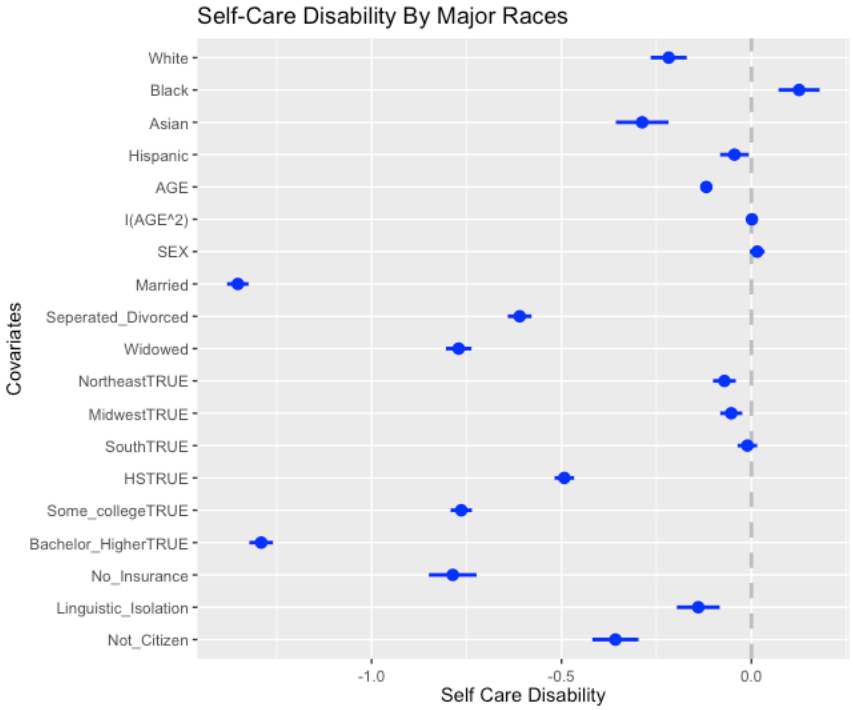

Figure 5

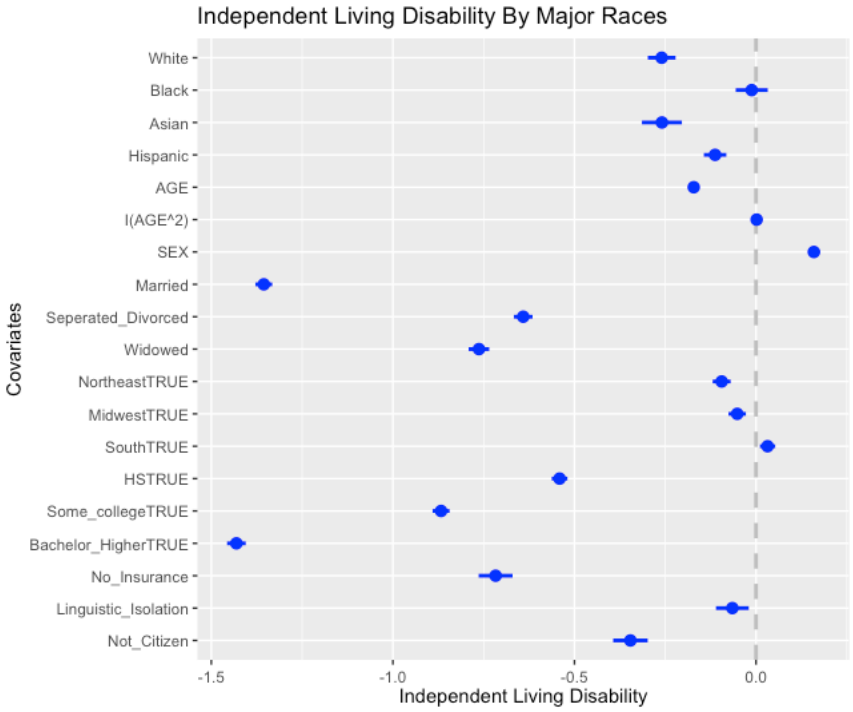

Figure 6

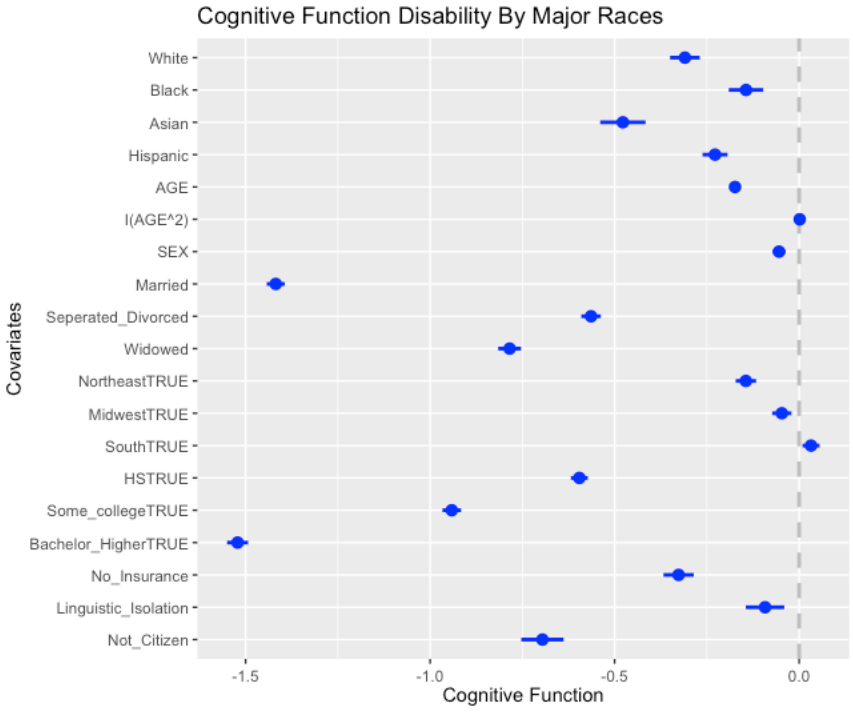

Figure 7

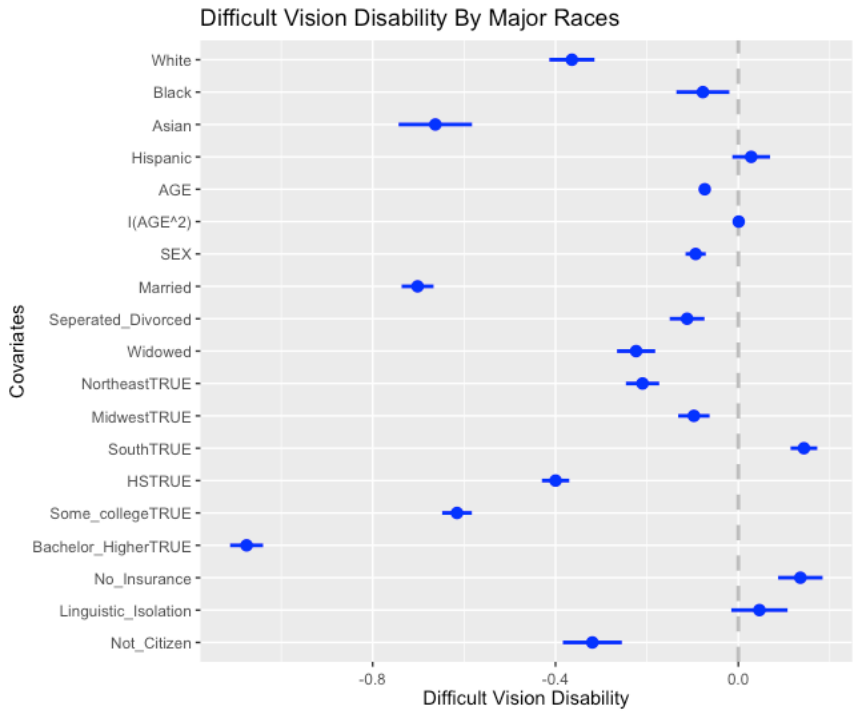
Difficult Vision Disability By Major Races
White
Black
Asian
Hispanic
AGE
I(AGE^2)
SEX
Married
Seperated_Divorced
Widowed
NortheastTRUE
MidwestTRUE
SouthTRUE
HSTRUE
Some_collegeTRUE
Bachelor_HigherTRUE
No_Insurance
Linguistic_Isolation
Not_Citizen
Covariates
-0.8
-0.4
0.0
Difficult Vision Disability

Figure 8

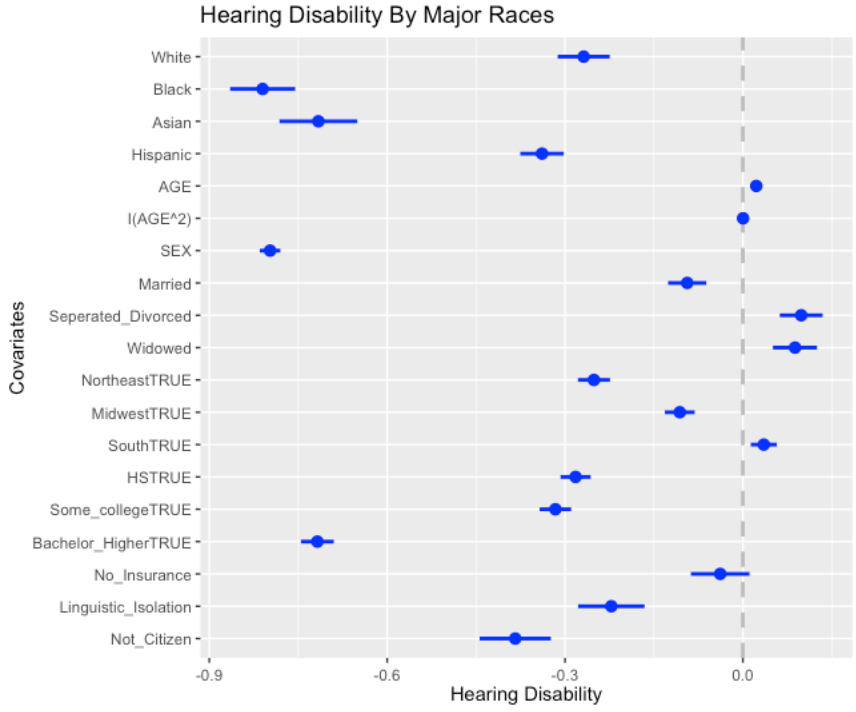
Hearing Disability By Major Races
White
Black
Asian
Hispanic
AGE
I(AGE^2)
SEX
Married
Seperated_Divorced
Widowed
NortheastTRUE
MidwestTRUE
SouthTRUE
HSTRUE
Some_collegeTRUE
Bachelor_HigherTRUE
No_Insurance
Linguistic_Isolation
Not_Citizen
Covariates
-0.9
-0.6
-0.3
0.0
Hearing Disability

Figure 11

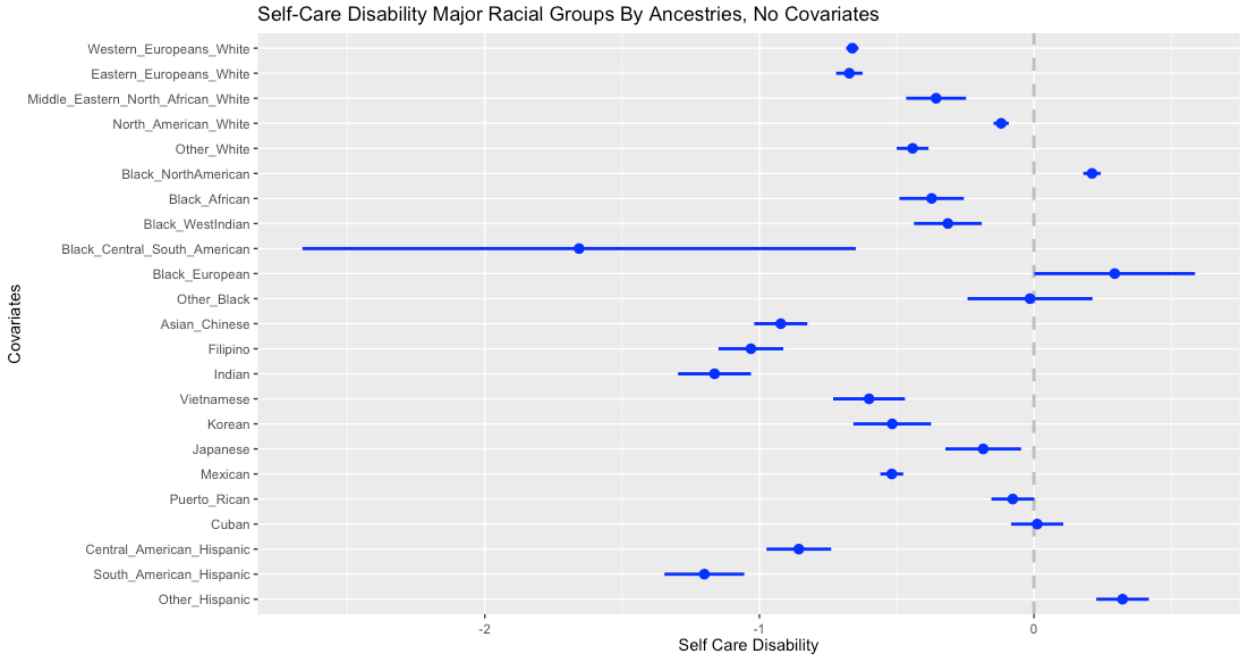

Figure 12

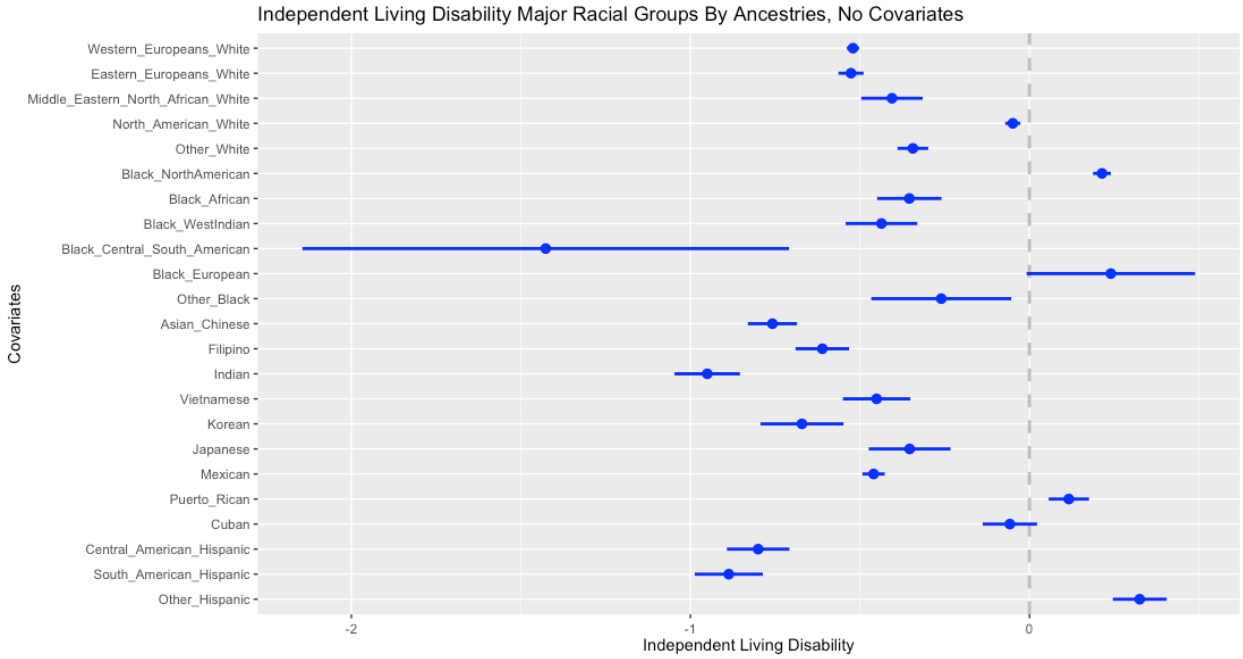

Figure 13

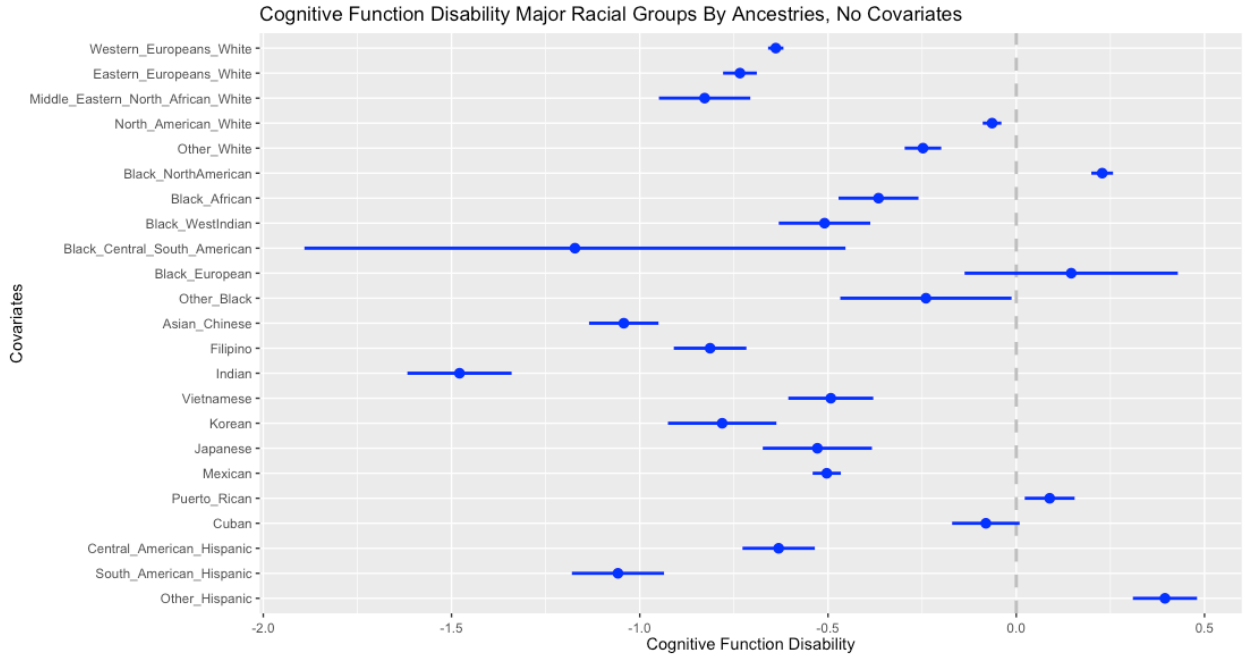

Figure 14

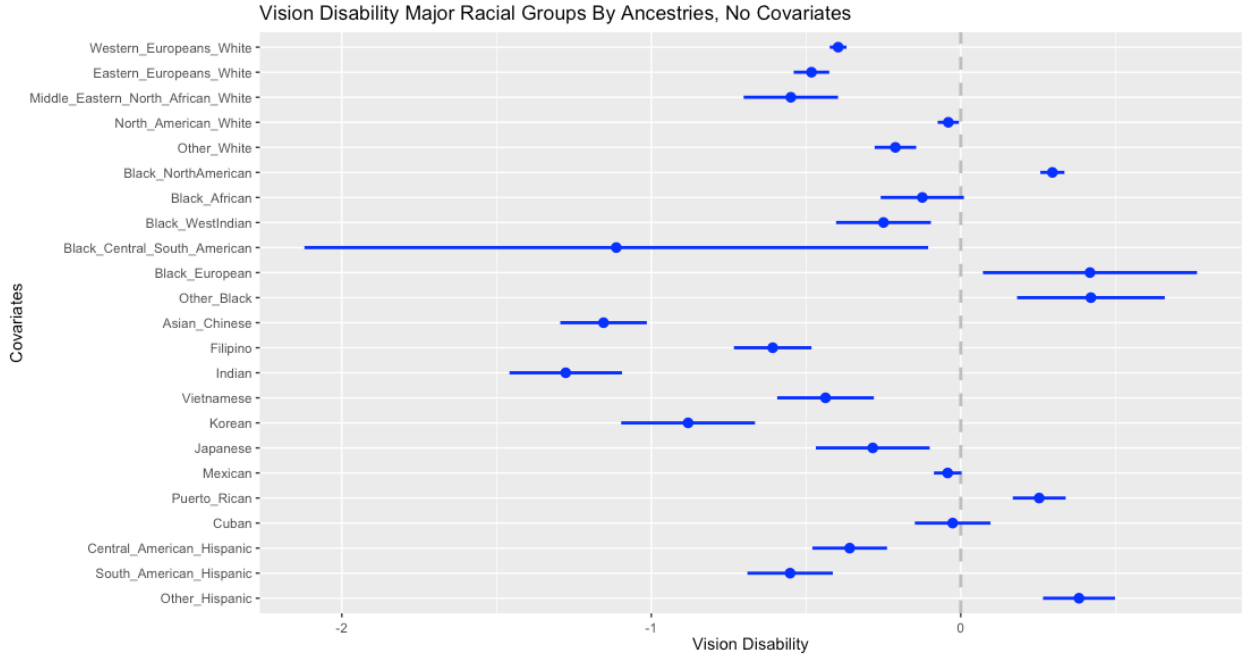

Figure 15

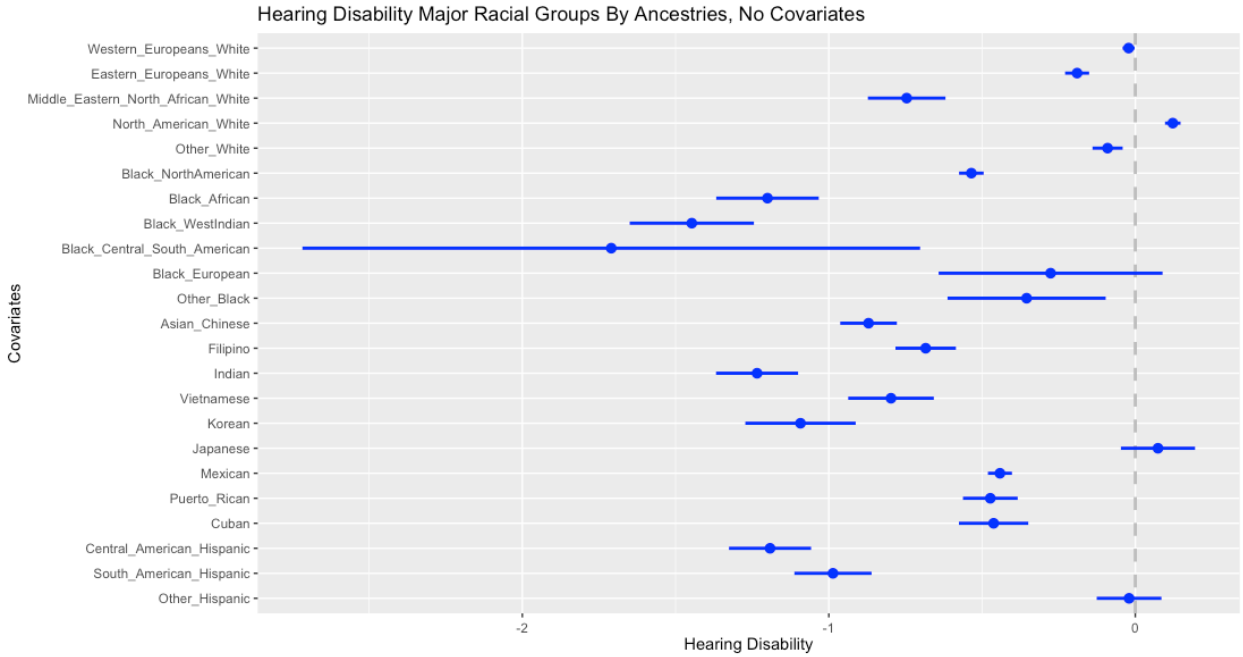
Hearing Disability Major Racial Groups By Ancestries, No Covariates
Western_Europeans_White
Eastern_Europeans_White
Middle_Eastern_North_African_White
North_American_White
Other_White
Black_NorthAmerican
Black_African
Black_WestIndian
Black_Central_South_American
Black_European
Other_Black
Asian_Chinese
Filipino
Indian
Vietnamese
Korean
Japanese
Mexican
Puerto_Rican
Cuban
Central_American_Hispanic
South_American_Hispanic
Other_Hispanic
Covariates
-2
-1
0
Hearing Disability

Figure 16

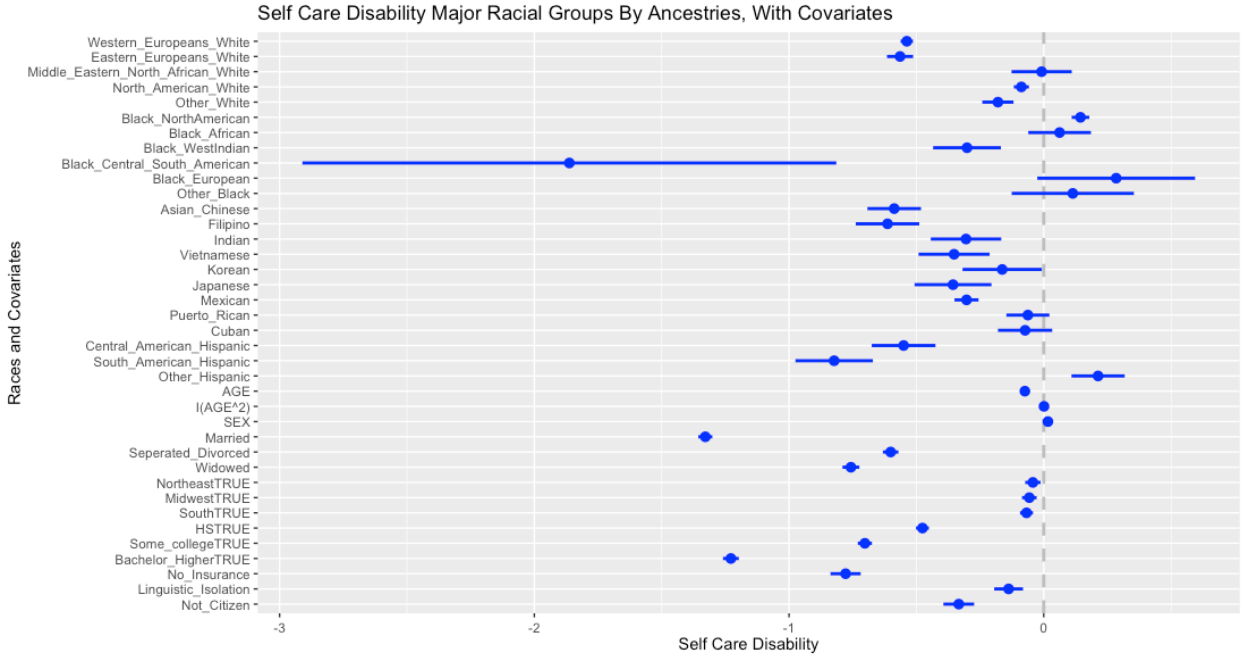
Self Care Disability Major Racial Groups By Ancestries, With Covariates
Western_Europeans_White
Eastern_Europeans_White
Middle_Eastern_North_African_White
North_American_White
Other_White
Black_NorthAmerican
Black_African
Black_WestIndian
Black_Central_South_American
Black_European
Other_Black
Asian_Chinese
Filipino
Indian
Vietnamese
Korean
Japanese
Mexican
Puerto_Rican
Cuban
Central_American_Hispanic
South_American_Hispanic
Other_Hispanic
AGE
I(AGE^2)
SEX
Married
Seperated_Divorced
Widowed
NortheastTRUE
MidwestTRUE
SouthTRUE
HSTRUE
Some_collegeTRUE
Bachelor_HigherTRUE
No_Insurance
Linguistic_Isolation
Not_Citizen
Races and Covariates
-3
-2
-1
0
Self Care Disability

Figure 17

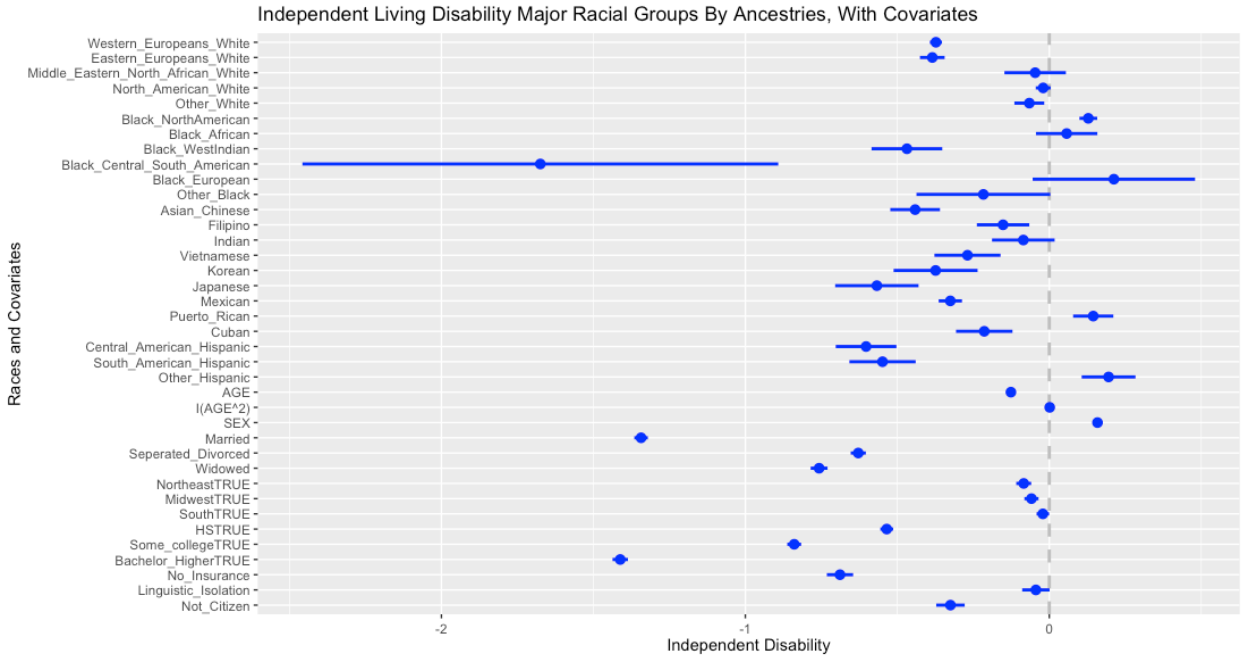

Figure 18

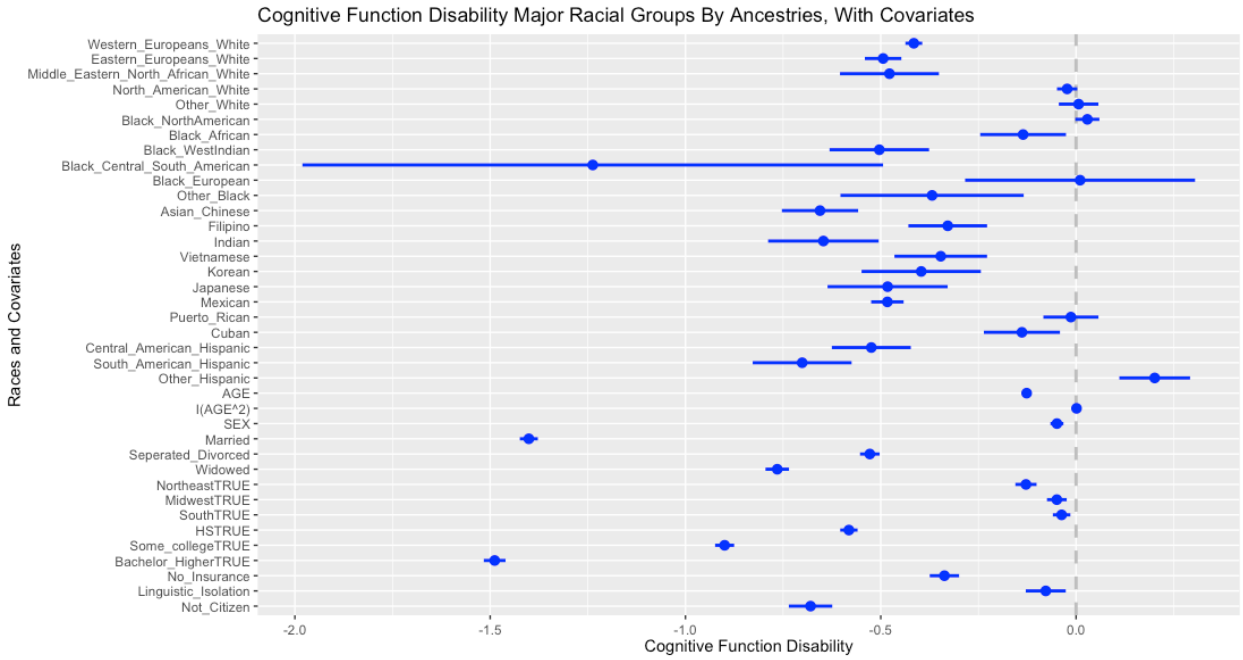

Figure 19

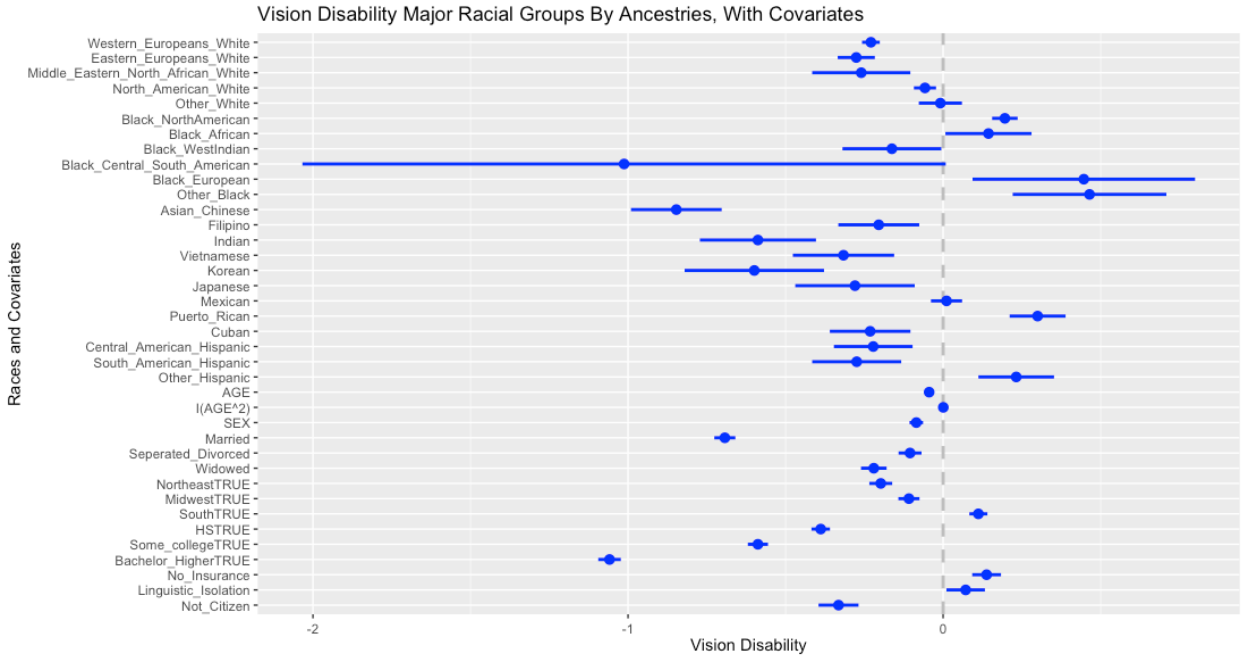

Figure 20

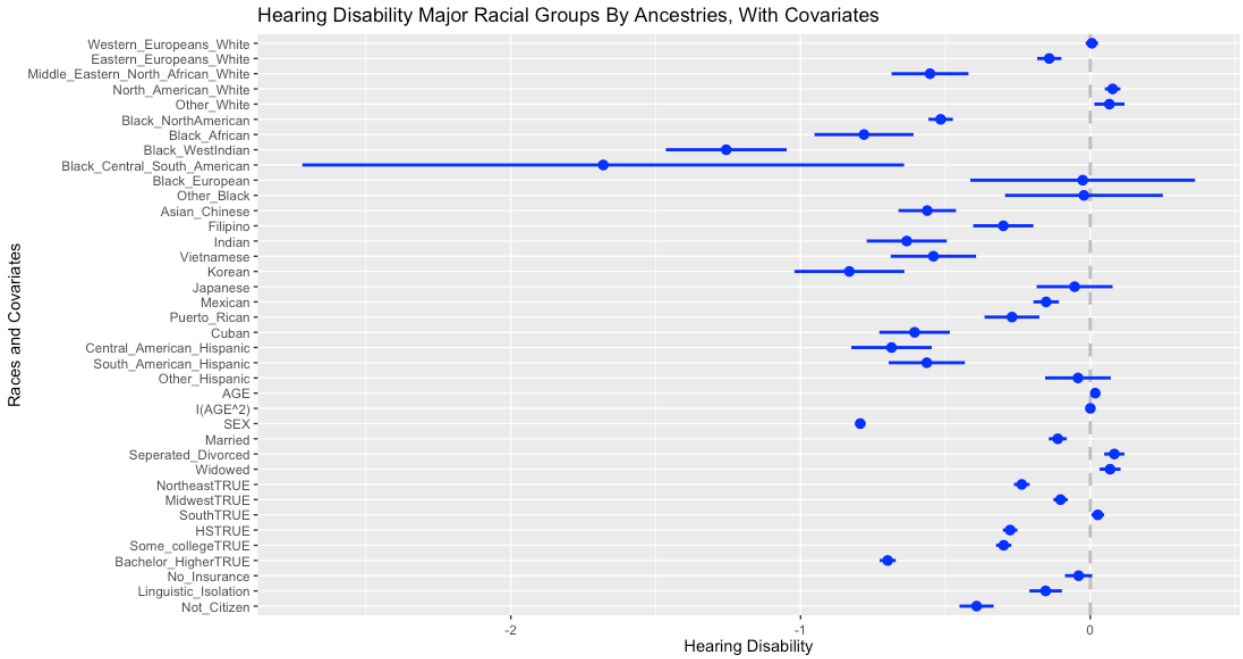

Figure 21

	Black North American (N=17269)	Black_African (N=1231)	Black West Indian (N=64)	Black Central South American (N=124)	Black_European (N=273)	Other_Black (N=3516)	Korean (N=873)	Japanese (N=1649)	Other Asian (N=1510)	Mexican (N=2606)	Puerto_Rican (N=1623)	Cuban (N=2228)	Central American Hispanic (N=2108)	South_American_Hispanic (N=1229)	Other Hispanic (N=2574)	Overall (N=262025)
Difficult_Self_care																
Yes	1558 (9.0%)	71 (5.8%)	1 (1.6%)	13 (10.5%)	20 (7.3%)	113 (3.2%)	57 (6.5%)	79 (4.8%)	707 (4.7%)	185 (7.1%)	124 (7.6%)	75 (3.4%)	49 (2.3%)	122 (9.9%)	74 (2.9%)	14635 (5.6%)
No	15711 (91.0%)	1160 (94.2%)	63 (98.4%)	111 (89.5%)	253 (92.7%)	3403 (96.8%)	816 (93.5%)	1570 (95.2%)	14403 (95.3%)	2421 (92.9%)	1499 (92.4%)	2153 (96.6%)	2059 (97.7%)	1107 (90.1%)	2500 (97.1%)	247390 (94.4%)
Difficult_Independent_Living																
Yes	2383 (13.8%)	99 (8.0%)	2 (3.1%)	19 (15.3%)	25 (9.2%)	209 (5.9%)	76 (8.7%)	146 (8.9%)	1169 (7.7%)	340 (13.0%)	181 (11.2%)	127 (5.7%)	107 (5.1%)	189 (15.4%)	173 (6.7%)	24297 (9.3%)
No	14886 (86.2%)	1132 (92.0%)	62 (96.9%)	105 (84.7%)	248 (90.8%)	3307 (94.1%)	797 (91.3%)	1503 (91.1%)	13941 (92.3%)	2266 (87.0%)	1442 (88.8%)	2101 (94.3%)	2001 (94.9%)	1040 (84.6%)	2401 (93.3%)	237728 (90.7%)
Difficult_Cognitive_Function																
Yes	1926 (11.2%)	71 (5.8%)	2 (3.1%)	14 (11.3%)	21 (7.7%)	125 (3.6%)	51 (5.8%)	99 (6.0%)	883 (5.8%)	260 (10.0%)	145 (8.9%)	117 (5.3%)	72 (3.4%)	161 (13.1%)	112 (4.4%)	18342 (7.0%)
No	15343 (88.8%)	1160 (94.2%)	62 (96.9%)	110 (88.7%)	252 (92.3%)	3391 (96.4%)	822 (94.2%)	1550 (94.0%)	14227 (94.2%)	2346 (90.0%)	1478 (91.1%)	2111 (94.7%)	2036 (96.6%)	1068 (86.9%)	2462 (95.6%)	243683 (93.0%)
Difficult_Vision																
Yes	1024 (5.9%)	45 (3.7%)	1 (1.6%)	9 (7.3%)	19 (7.0%)	53 (1.5%)	31 (3.6%)	41 (2.5%)	662 (4.4%)	152 (5.8%)	74 (4.6%)	70 (3.1%)	56 (2.7%)	80 (6.5%)	65 (2.5%)	10101 (3.9%)
No	16245 (94.1%)	1186 (96.3%)	63 (98.4%)	115 (92.7%)	254 (93.0%)	3463 (98.5%)	842 (96.4%)	1608 (97.5%)	14448 (95.6%)	2454 (94.2%)	1549 (95.4%)	2158 (96.9%)	2052 (97.3%)	1149 (93.5%)	2509 (97.5%)	251924 (96.1%)
Difficult_Hearing																
Yes	812 (4.7%)	23 (1.9%)	1 (1.6%)	8 (6.5%)	16 (5.9%)	125 (3.6%)	76 (8.7%)	55 (3.3%)	806 (5.3%)	134 (5.1%)	84 (5.2%)	59 (2.6%)	67 (3.2%)	97 (7.9%)	105 (4.1%)	19060 (7.3%)
No	16457 (95.3%)	1208 (98.1%)	63 (98.4%)	116 (93.5%)	257 (94.1%)	3391 (96.4%)	797 (91.3%)	1594 (96.7%)	14304 (94.7%)	2472 (94.9%)	1539 (94.8%)	2169 (97.4%)	2041 (96.8%)	1132 (92.1%)	2469 (95.9%)	242965 (92.7%)
AGE																
Mean (SD)	59.9 (12.2)	58.9 (12.6)	58.6 (14.0)	59.0 (11.7)	57.0 (11.7)	58.5 (12.6)	63.8 (14.3)	56.2 (11.6)	56.1 (12.0)	58.0 (12.6)	61.0 (13.9)	54.8 (11.1)	56.9 (12.2)	60.3 (13.4)	58.7 (12.4)	61.2 (12.8)
Median [Min, Max]	59.0 [40.0, 95.0]	57.0 [40.0, 95.0]	59.0 [40.0, 95.0]	58.0 [40.0, 94.0]	56.0 [40.0, 94.0]	57.0 [40.0, 95.0]	63.0 [40.0, 95.0]	54.0 [40.0, 95.0]	54.0 [40.0, 95.0]	56.0 [40.0, 95.0]	58.0 [40.0, 95.0]	53.0 [40.0, 94.0]	55.0 [40.0, 95.0]	59.0 [40.0, 95.0]	57.0 [40.0, 95.0]	60.0 [40.0, 96.0]
SEX																
Mean (SD)	1.55 (0.498)	1.59 (0.492)	1.55 (0.502)	1.61 (0.489)	1.62 (0.487)	1.57 (0.496)	1.62 (0.485)	1.53 (0.499)	1.51 (0.500)	1.53 (0.499)	1.52 (0.500)	1.54 (0.498)	1.56 (0.497)	1.57 (0.495)	1.62 (0.486)	1.53 (0.499)
Median [Min, Max]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]
Married																
Mean (SD)	0.405 (0.491)	0.521 (0.500)	0.453 (0.502)	0.323 (0.469)	0.370 (0.484)	0.752 (0.432)	0.633 (0.482)	0.727 (0.446)	0.633 (0.482)	0.513 (0.500)	0.575 (0.495)	0.613 (0.487)	0.670 (0.470)	0.496 (0.500)	0.730 (0.444)	0.627 (0.484)
Median [Min, Max]	0 [0, 1.00]	1.00 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	0 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]
Seperated/Divorced																
Mean (SD)	0.237 (0.425)	0.201 (0.401)	0.266 (0.445)	0.282 (0.452)	0.282 (0.451)	0.0981 (0.298)	0.126 (0.332)	0.0922 (0.289)	0.163 (0.369)	0.223 (0.416)	0.219 (0.414)	0.161 (0.368)	0.185 (0.388)	0.220 (0.414)	0.0952 (0.294)	0.167 (0.373)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Widowed																
Mean (SD)	0.108 (0.310)	0.0699 (0.255)	0.109 (0.315)	0.121 (0.327)	0.0952 (0.294)	0.0691 (0.254)	0.115 (0.319)	0.0800 (0.271)	0.0679 (0.252)	0.0779 (0.268)	0.0961 (0.295)	0.0583 (0.234)	0.0617 (0.241)	0.117 (0.322)	0.0913 (0.288)	0.0996 (0.299)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Never Married/Single																
Mean (SD)	0.250 (0.433)	0.208 (0.406)	0.172 (0.380)	0.274 (0.448)	0.253 (0.435)	0.0805 (0.272)	0.126 (0.332)	0.101 (0.302)	0.137 (0.343)	0.186 (0.389)	0.110 (0.313)	0.167 (0.373)	0.0830 (0.276)	0.167 (0.373)	0.0839 (0.277)	0.106 (0.308)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Northeast Region																
Yes	2136 (12.4%)	620 (50.4%)	46 (71.9%)	26 (21.0%)	37 (13.6%)	920 (26.2%)	65 (7.4%)	274 (16.6%)	278 (1.8%)	1192 (45.7%)	136 (8.4%)	328 (14.7%)	623 (29.6%)	151 (12.3%)	264 (10.3%)	47097 (18.0%)
No	15133 (87.6%)	611 (49.6%)	18 (28.1%)	98 (79.0%)	236 (86.4%)	2596 (73.8%)	808 (92.6%)	1375 (83.4%)	14832 (98.2%)	1414 (54.3%)	1487 (91.6%)	1900 (85.3%)	1485 (70.4%)	1078 (87.7%)	2310 (89.7%)	214928 (82.0%)
Midwest Region																
Yes	2888 (16.7%)	15 (1.2%)	0 (0%)	14 (11.3%)	44 (16.1%)	205 (5.8%)	45 (5.2%)	192 (11.6%)	1181 (7.8%)	220 (8.4%)	44 (2.7%)	88 (3.9%)	101 (4.8%)	84 (6.8%)	186 (7.2%)	56268 (21.5%)
No	14381 (83.3%)	1216 (98.8%)	64 (100%)	110 (88.7%)	229 (83.9%)	3311 (94.2%)	828 (94.8%)	1457 (88.4%)	13929 (92.2%)	2386 (91.6%)	1579 (97.3%)	2140 (96.1%)	2007 (95.2%)	1145 (93.2%)	2388 (92.8%)	205757 (78.5%)
South Region																
Yes	10596 (61.4%)	551 (44.8%)	17 (26.6%)	70 (56.5%)	166 (60.8%)	514 (14.6%)	110 (12.6%)	412 (25.0%)	5497 (36.4%)	1003 (38.5%)	1330 (81.9%)	893 (40.1%)	1036 (49.1%)	411 (33.4%)	423 (16.4%)	99682 (38.0%)
No	6673 (38.6%)	680 (55.2%)	47 (73.4%)	54 (43.5%)	107 (39.2%)	3002 (85.4%)	763 (87.4%)	1237 (75.0%)	9613 (63.6%)	1603 (61.5%)	293 (18.1%)	1335 (59.9%)	1072 (50.9%)	818 (66.6%)	2151 (83.6%)	162343 (62.0%)
West Region																
Yes	1649 (9.5%)	45 (3.7%)	1 (1.6%)	14 (11.3%)	26 (9.5%)	1877 (53.4%)	653 (74.8%)	771 (46.8%)	8154 (54.0%)	191 (7.3%)	113 (7.0%)	919 (41.2%)	348 (16.5%)	583 (47.4%)	1701 (66.1%)	58978 (22.5%)
No	15620 (90.5%)	1186 (96.3%)	63 (98.4%)	110 (88.7%)	247 (90.5%)	1639 (46.6%)	220 (25.2%)	878 (53.2%)	6956 (46.0%)	2415 (92.7%)	1510 (93.0%)	1309 (58.8%)	1760 (83.5%)	646 (52.6%)	873 (33.9%)	203047 (77.5%)
Less Than High School Diploma																
Yes	2585 (15.0%)	235 (19.1%)	12 (18.8%)	15 (12.1%)	35 (12.8%)	629 (17.9%)	38 (4.4%)	351 (21.3%)	5972 (39.5%)	565 (21.7%)	377 (23.2%)	949 (42.6%)	313 (14.8%)	306 (24.9%)	201 (7.8%)	29275 (11.2%)
No	14684 (85.0%)	996 (80.9%)	52 (81.3%)	109 (87.9%)	238 (87.2%)	2887 (82.1%)	835 (95.6%)	1298 (78.7%)	9138 (60.5%)	2041 (78.3%)	1246 (76.8%)	1279 (57.4%)	1795 (85.2%)	923 (75.1%)	2373 (92.2%)	232750 (88.8%)
High School Diploma																
Yes	5352 (31.0%)	352 (28.6%)	12 (18.8%)	36 (29.0%)	88 (32.2%)	586 (16.7%)	167 (19.1%)	331 (20.1%)	3941 (26.1%)	740 (28.4%)	411 (25.3%)	530 (23.8%)	492 (23.3%)	408 (33.2%)	391 (15.2%)	74200 (28.3%)
No	11917 (69.0%)	879 (71.4%)	52 (81.3%)	88 (71.0%)	185 (67.8%)	2930 (83.3%)	706 (80.9%)	1318 (79.9%)	11169 (73.9%)	1866 (71.6%)	1212 (74.7%)	1698 (76.2%)	1616 (76.7%)	821 (66.8%)	2183 (84.8%)	187825 (71.7%)
Some College/Associates Degree																
Yes	5427 (31.4%)	314 (25.5%)	18 (28.1%)	42 (33.9%)	89 (32.6%)	475 (13.5%)	230 (26.3%)	362 (22.0%)	3303 (21.9%)	721 (27.7%)	360 (22.2%)	465 (20.9%)	545 (25.9%)	304 (24.7%)	638 (24.8%)	74424 (28.4%)
No	11842 (68.6%)	917 (74.5%)	46 (71.9%)	82 (66.1%)	184 (67.4%)	3041 (86.5%)	643 (73.7%)	1287 (78.0%)	11807 (78.1%)	1885 (72.3%)	1263 (77.8%)	1763 (79.1%)	1563 (74.1%)	925 (75.3%)	1936 (75.2%)	187601 (71.6%)
Bachelor's Degree or Higher																
Yes	3905 (22.6%)	330 (26.8%)	22 (34.4%)	31 (25.0%)	61 (22.3%)	1826 (51.9%)	438 (50.2%)	605 (36.7%)	1894 (12.5%)	580 (22.3%)	475 (29.3%)	284 (12.7%)	758 (36.0%)	211 (17.2%)	1344 (52.2%)	84126 (32.1%)
No	13364 (77.4%)	901 (73.2%)	42 (65.6%)	93 (75.0%)	212 (77.7%)	1690 (48.1%)	435 (49.8%)	1044 (63.3%)	13216 (87.5%)	2026 (77.7%)	1148 (70.7%)	1944 (87.3%)	1350 (64.0%)	1018 (82.8%)	1230 (47.8%)	177899 (67.9%)
No Health Inusrance																
Mean (SD)	0.0855 (0.280)	0.101 (0.301)	0.0469 (0.213)	0.0323 (0.177)	0.106 (0.309)	0.0512 (0.220)	0.0183 (0.134)	0.0770 (0.267)	0.192 (0.394)	0.0748 (0.263)	0.109 (0.312)	0.213 (0.409)	0.136 (0.343)	0.123 (0.328)	0.0455 (0.208)	0.0606 (0.239)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Limited English Proficiency																
Mean (SD)	0.00678 (0.0820)	0.0658 (0.248)	0 (0)	0 (0)	0.0110 (0.104)	0.272 (0.445)	0.0962 (0.295)	0.138 (0.345)	0.134 (0.340)	0.116 (0.321)	0.261 (0.439)	0.204 (0.403)	0.195 (0.397)	0.0659 (0.248)	0.0676 (0.251)	0.0302 (0.171)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 0]	0 [0, 0]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Not a U.S. Citizen																
Mean (SD)	0.0159 (0.125)	0.215 (0.411)	0.172 (0.380)	0.0403 (0.198)	0.0110 (0.104)	0.228 (0.420)	0.234 (0.423)	0.191 (0.393)	0.280 (0.449)	0.0107 (0.103)	0.202 (0.402)	0.401 (0.490)	0.281 (0.450)	0.0862 (0.281)	0.176 (0.381)	0.0470 (0.212)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]

All OLS Models

Figure 22

OLS Model 1, Major Racial Groups No Covariates

	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
White	-0.005**	-0.011***	-0.022***	-0.012***	-0.0001
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)
Black	0.027***	0.030***	0.016***	0.009***	-0.033***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)
Asian	-0.022***	-0.035***	-0.046***	-0.027***	-0.043***
	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)
Hispanic	-0.005***	-0.010***	-0.010***	0.003**	-0.031***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Constant	0.059***	0.102***	0.089***	0.049***	0.081***
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)
Observations	262,025	262,025	262,025	262,025	262,025
R^2	0.002	0.002	0.003	0.002	0.003
Adjusted R^2	0.002	0.002	0.003	0.002	0.003
Residual Std. Error (df = 262020)	0.229	0.290	0.255	0.192	0.259
F Statistic (df = 4; 262020)	127.717***	140.550***	174.837***	104.105***	217.280***
Note:					*p**p***p<0.01

Figure 23

OLS Model 2, Major Racial Groups with Covariates

	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
White	-0.008***	-0.014***	-0.016***	-0.013***	-0.013***
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Black	0.013***	0.007**	-0.003	0.001	-0.040***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)
Asian	-0.006**	-0.009***	-0.020***	-0.017***	-0.029***
	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)
Hispanic	-0.004**	-0.012***	-0.018***	0.001	-0.018***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
AGE	-0.019***	-0.029***	-0.016***	-0.007***	-0.019***
	(0.0003)	(0.0004)	(0.0003)	(0.0003)	(0.0003)
I(AGE2)	0.0002***	0.0003***	0.0001***	0.0001***	0.0002***
	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)
SEX	0.005***	0.015***	-0.001	-0.002**	-0.044***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Married	-0.063***	-0.100***	-0.098***	-0.022***	-0.003*
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
Seperated_Divorced	-0.032***	-0.052***	-0.047***	-0.002	0.007***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Widowed	-0.024***	-0.035***	-0.053***	0.001	0.004*
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Northeast	-0.001	-0.003	-0.006***	-0.006***	-0.013***
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
Midwest	-0.001	-0.001	-0.001	-0.003**	-0.005***
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
South	0.0001	0.003**	0.003**	0.006***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
HS	-0.044***	-0.069***	-0.064***	-0.025***	-0.023***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)

Some_college	-0.058***	-0.096***	-0.088***	-0.034***	-0.024***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Bachelor_Higher	-0.075***	-0.124***	-0.111***	-0.045***	-0.044***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
No_Insurance	-0.028***	-0.042***	-0.023***	0.001	-0.005**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Linguistic_Isolation	-0.012***	-0.011***	-0.012***	-0.001	-0.016***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)
Not_Citizen	-0.019***	-0.030***	-0.040***	-0.015***	-0.015***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
Constant	0.628***	0.969***	0.663***	0.272***	0.605***
	(0.009)	(0.012)	(0.011)	(0.008)	(0.011)
Observations	262,025	262,025	262,025	262,025	262,025
R^2	0.094	0.142	0.069	0.032	0.097
Adjusted R^2	0.094	0.142	0.069	0.032	0.097
Residual Std. Error (df = 262005)	0.219	0.269	0.246	0.189	0.247
F Statistic (df = 19; 262005)	1,434.232***	2,281.262***	1,028.525***	452.158***	1,483.824***
Note:					*p**p***p<0.01

Figure 24

OLS Model 1, All Ancestry Subgroups No Covariates

	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
Western_Europeans_White	-0.035***	-0.044***	-0.042***	-0.015***	-0.002
	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Eastern_Europeans_White	-0.036***	-0.045***	-0.047***	-0.017***	-0.013***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
Middle_Eastern_North_African_White	-0.022***	-0.036***	-0.050***	-0.019***	-0.040***
	(0.006)	(0.007)	(0.006)	(0.005)	(0.006)
North_American_White	-0.008***	-0.005**	-0.005***	-0.002	0.010***

	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Other_White	-0.026***	-0.031***	-0.019***	-0.008***	-0.006*
	(0.003)	(0.004)	(0.003)	(0.002)	(0.003)
Black_NorthAmerican	0.017***	0.024***	0.022***	0.015***	-0.032***
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Black_African	-0.022***	-0.032***	-0.027***	-0.005	-0.055***
	(0.006)	(0.008)	(0.007)	(0.005)	(0.007)
Black_WestIndian	-0.019***	-0.038***	-0.035***	-0.010*	-0.060***
	(0.007)	(0.008)	(0.007)	(0.006)	(0.007)
Black_Central_South_American	-0.061**	-0.087**	-0.063**	-0.030	-0.065**
	(0.029)	(0.036)	(0.032)	(0.024)	(0.032)
Black_European	0.023	0.027	0.013	0.022	-0.018
	(0.020)	(0.025)	(0.022)	(0.017)	(0.023)
Other_Black	-0.001	-0.024	-0.019	0.023*	-0.023
	(0.014)	(0.017)	(0.015)	(0.012)	(0.016)
Asian_Chinese	-0.045***	-0.059***	-0.059***	-0.031***	-0.045***
	(0.004)	(0.005)	(0.004)	(0.003)	(0.005)
Filipino	-0.048***	-0.050***	-0.050***	-0.020***	-0.038***
	(0.005)	(0.006)	(0.005)	(0.004)	(0.005)
Indian	-0.051***	-0.069***	-0.071***	-0.033***	-0.056***
	(0.005)	(0.006)	(0.005)	(0.004)	(0.005)
Vietnamese	-0.033***	-0.039***	-0.034***	-0.016***	-0.043***
	(0.006)	(0.008)	(0.007)	(0.005)	(0.007)
Korean	-0.029***	-0.054***	-0.049***	-0.026***	-0.052***
	(0.007)	(0.009)	(0.008)	(0.006)	(0.008)
Japanese	-0.012	-0.032***	-0.036***	-0.011*	0.006
	(0.008)	(0.010)	(0.009)	(0.007)	(0.009)
Mexican	-0.029***	-0.040***	-0.035***	-0.002	-0.027***
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Puerto_Rican	-0.005	0.013**	0.008	0.012***	-0.029***
	(0.005)	(0.006)	(0.005)	(0.004)	(0.005)
Cuban	0.001	-0.006	-0.006	-0.001	-0.028***
	(0.006)	(0.007)	(0.006)	(0.005)	(0.007)
Central_American_Hispanic	-0.042***	-0.061***	-0.041***	-0.013***	-0.054***
	(0.005)	(0.006)	(0.005)	(0.004)	(0.006)
South_American_Hispanic	-0.050***	-0.064***	-0.057***	-0.018***	-0.049***

	(0.005)	(0.006)	(0.006)	(0.004)	(0.006)
Other_Hispanic	0.025***	0.037***	0.038***	0.019***	-0.001
	(0.006)	(0.008)	(0.007)	(0.005)	(0.007)
Constant	0.077***	0.118***	0.094***	0.046***	0.081***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Observations	262,025	262,025	262,025	262,025	262,025
R^2	0.007	0.007	0.008	0.003	0.004
Adjusted R^2	0.006	0.007	0.008	0.003	0.004
Residual Std. Error (df = 262001)	0.229	0.289	0.254	0.192	0.259
F Statistic (df = 23; 262001)	75.339***	83.235***	95.174***	30.770***	43.707***
Note:					*p**p***p<0.01

Figure 25

OLS Model 2, All Ancestry Subgroups and Covariates

	Dependent variable:				
	Self-Care Disability	Independent Living Disability	Cognitive Function Disability	Vision Disability	Hearing Disability
	(1)	(2)	(3)	(4)	(5)
Western_Europeans_White	-0.027***	-0.029***	-0.027***	-0.009***	0.0001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Eastern_Europeans_White	-0.028***	-0.029***	-0.029***	-0.010***	-0.009***
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Middle_Eastern_North_African_White	-0.001	-0.002	-0.024***	-0.007	-0.024***
	(0.005)	(0.007)	(0.006)	(0.005)	(0.006)
North_American_White	-0.007***	-0.004**	-0.004**	-0.003**	0.006***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Other_White	-0.012***	-0.009**	-0.003	-0.001	0.004
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)
Black_NorthAmerican	0.011***	0.014***	0.007***	0.011***	-0.027***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Black_African	-0.00002	0.002	-0.010	0.005	-0.029***
	(0.006)	(0.007)	(0.007)	(0.005)	(0.007)

Black_WestIndian	-0.015**	-0.032***	-0.033***	-0.006	-0.041***
	(0.006)	(0.008)	(0.007)	(0.005)	(0.007)
Black_Central_South_American	-0.064**	-0.089***	-0.065**	-0.027	-0.051*
	(0.027)	(0.034)	(0.031)	(0.024)	(0.031)
Black_European	0.021	0.023	0.003	0.022	-0.003
	(0.019)	(0.023)	(0.022)	(0.017)	(0.022)
Other_Black	0.004	-0.020	-0.027*	0.023**	-0.0005
	(0.013)	(0.016)	(0.015)	(0.011)	(0.015)
Asian_Chinese	-0.022***	-0.024***	-0.030***	-0.018***	-0.019***
	(0.004)	(0.005)	(0.004)	(0.003)	(0.004)
Filipino	-0.023***	-0.011**	-0.018***	-0.005	-0.012**
	(0.004)	(0.005)	(0.005)	(0.004)	(0.005)
Indian	-0.013***	-0.006	-0.024***	-0.010**	-0.020***
	(0.005)	(0.006)	(0.005)	(0.004)	(0.005)
Vietnamese	-0.019***	-0.022***	-0.026***	-0.012**	-0.022***
	(0.006)	(0.007)	(0.007)	(0.005)	(0.007)
Korean	-0.003	-0.014*	-0.015*	-0.012**	-0.025***
	(0.007)	(0.008)	(0.007)	(0.006)	(0.008)
Japanese	-0.013*	-0.032***	-0.023***	-0.007	0.001
	(0.007)	(0.009)	(0.008)	(0.006)	(0.008)
Mexican	-0.021***	-0.031***	-0.038***	-0.002	-0.011***
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Puerto_Rican	-0.004	0.013**	0.0004	0.013***	-0.013***
	(0.004)	(0.005)	(0.005)	(0.004)	(0.005)
Cuban	0.001	-0.010	-0.007	-0.007	-0.031***
	(0.006)	(0.007)	(0.006)	(0.005)	(0.006)
Central_American_Hispanic	-0.029***	-0.047***	-0.040***	-0.011***	-0.027***
	(0.005)	(0.006)	(0.005)	(0.004)	(0.005)
South_American_Hispanic	-0.025***	-0.026***	-0.030***	-0.007*	-0.019***
	(0.005)	(0.006)	(0.006)	(0.004)	(0.006)
Other_Hispanic	0.016**	0.020***	0.021***	0.013**	-0.002
	(0.006)	(0.008)	(0.007)	(0.005)	(0.007)
AGE	-0.019***	-0.029***	-0.016***	-0.007***	-0.019***
	(0.0003)	(0.0004)	(0.0003)	(0.0003)	(0.0003)
I(AGE2)	0.0002***	0.0003***	0.0001***	0.0001***	0.0002***
	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)

SEX	0.004***	0.015***	-0.001	-0.002**	-0.044***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Married	-0.062***	-0.098***	-0.096***	-0.022***	-0.002
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
Seperated_Divorced	-0.031***	-0.052***	-0.047***	-0.002	0.007***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Widowed	-0.024***	-0.035***	-0.053***	0.001	0.004*
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Northeast	0.001	-0.003	-0.005***	-0.005***	-0.012***
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
Midwest	-0.0004	-0.001	-0.001	-0.003**	-0.005***
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)
South	-0.002*	-0.0002	-0.001	0.005***	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
HS	-0.043***	-0.068***	-0.064***	-0.025***	-0.022***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Some_college	-0.055***	-0.093***	-0.085***	-0.033***	-0.023***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
Bachelor_Higher	-0.070***	-0.119***	-0.107***	-0.044***	-0.043***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
No_Insurance	-0.028***	-0.042***	-0.023***	0.002	-0.004**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Linguistic_Isolation	-0.012***	-0.010***	-0.012***	0.001	-0.013***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)
Not_Citizen	-0.015***	-0.023***	-0.034***	-0.012***	-0.014***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
Constant	0.621***	0.957***	0.649***	0.261***	0.592***
	(0.009)	(0.011)	(0.010)	(0.008)	(0.011)
Observations	262,025	262,025	262,025	262,025	262,025
R^2	0.097	0.144	0.072	0.032	0.097
Adjusted R^2	0.097	0.144	0.072	0.032	0.097
Residual Std. Error (df = 261986)	0.218	0.268	0.246	0.189	0.247
F Statistic (df = 38; 261986)	738.073***	1,160.708***	533.051***	228.123***	742.290***
Note:					*p**p***p<0.01

Figure 26

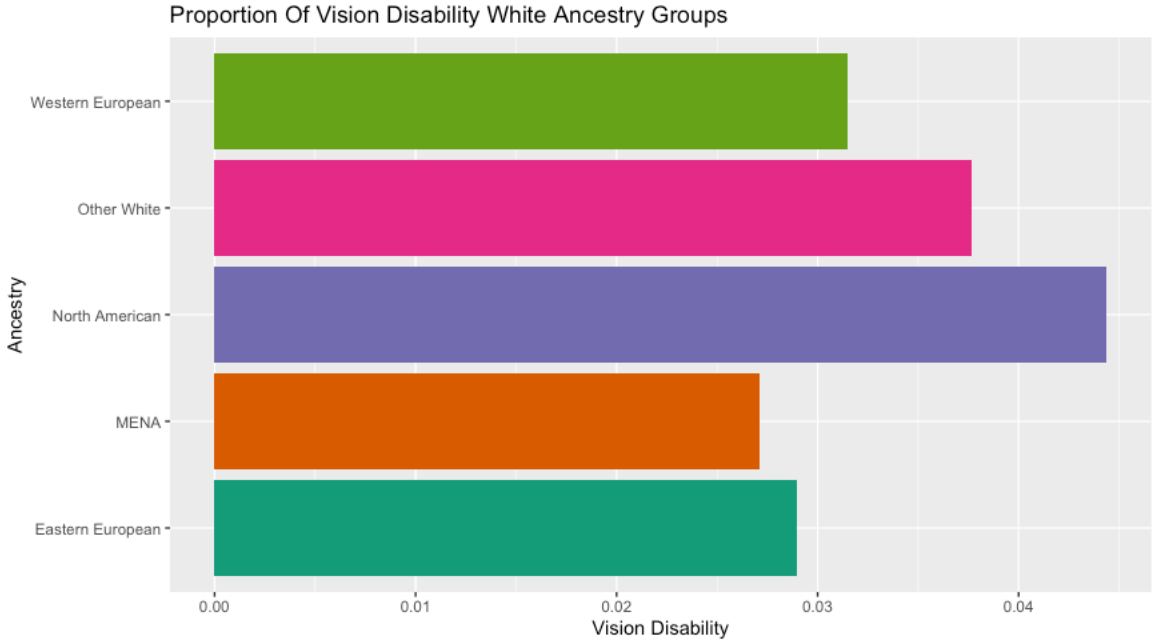

Figure 27

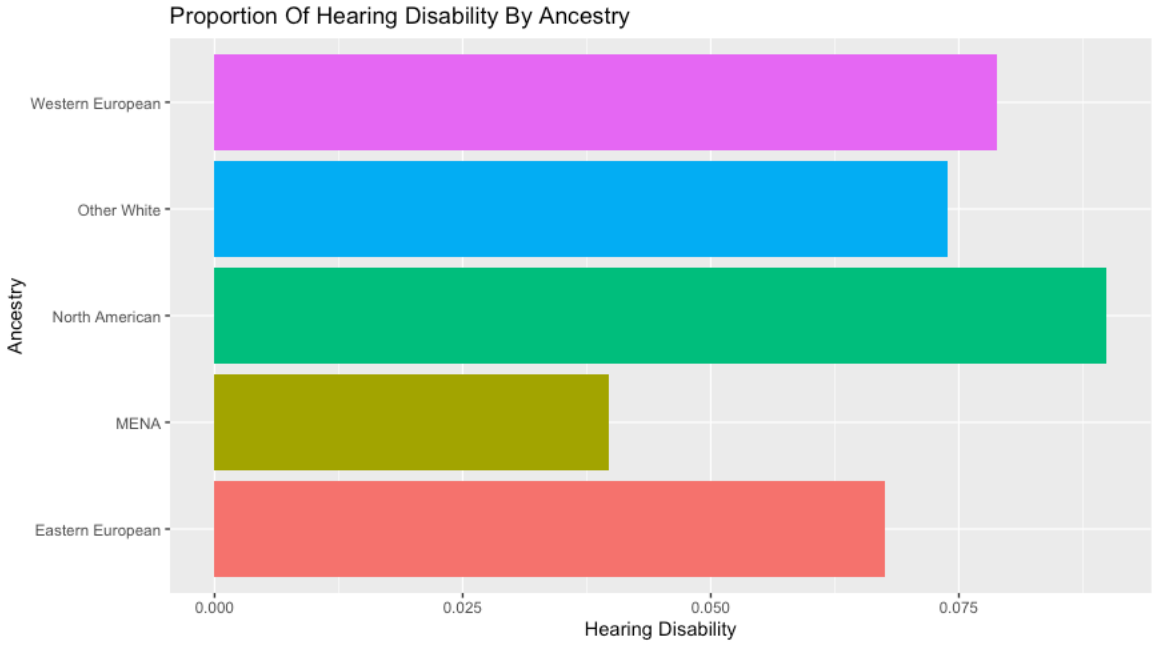

Figure 28

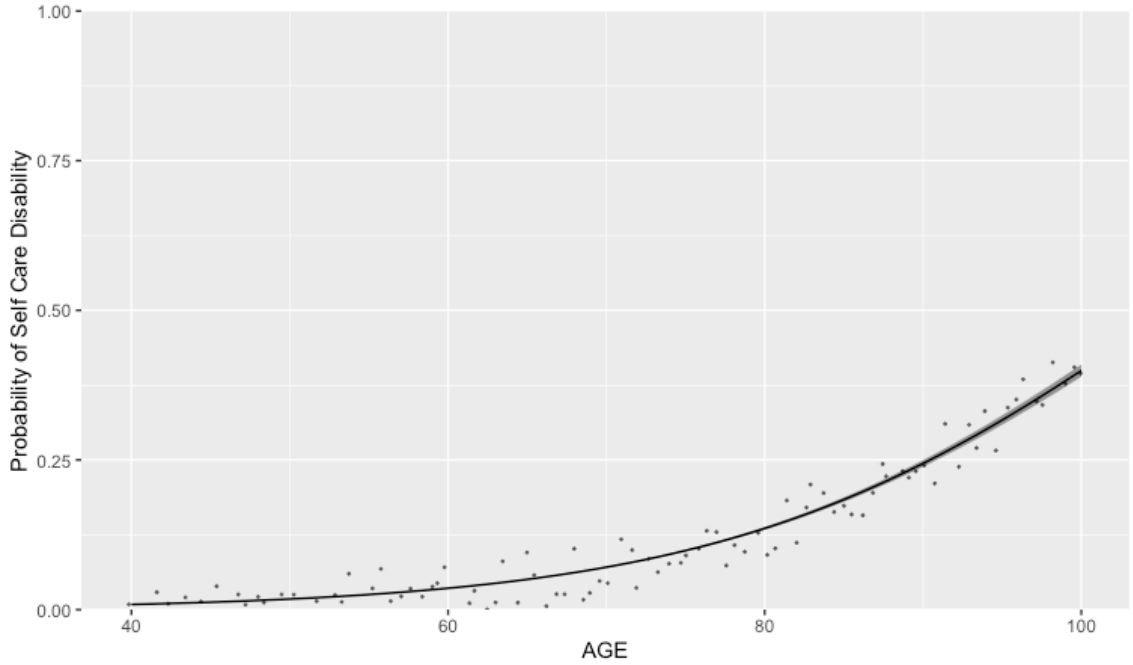

Figure 29