Cultural Assimilation and Health Disparity: Measuring the Outcomes of Interracial Marriages for American Indians

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Undergraduate Honors Thesis
Presented to the Department of Economics
University of Colorado Boulder

28 March 2016

CONTENTS

INTRODUCTION

Initially motivated by the known disparities in socioeconomic, educational, and health outcomes for American Indians[1] in the United States, my thesis broadly addresses the ways that interracial marriage, as a proxy for cultural assimilation, affects the health of minorities, and American Indians in particular. While my primary curiosity remains the health outcomes for American Indians in interracial marriages with whites, I examine health outcomes for individuals with white spouses across several minority groups. While a large body of existing literature documents health disparities for minorities in the United States, few have attempted to explain poor health outcomes in relation to interracial marriage.

Increasing diversity and connectedness in the United States, I believe, necessitates better understandings of the potential benefits and consequences of cultural assimilation for diverse populations. As I will show, existing scholarship suggests that interracial marriage could be advantageous or damaging to individuals involved. With this in mind, this report seeks to understand how the social and cultural "work" of assimilation affects the health of individuals involved in interracial marriages. Specifically, the purpose of this thesis is to examine the relationship between poor health outcomes and interracial marriage for minorities marrying whites, and American Indians marrying whites in particular.

In the sections that follow, I outline preexisting literature on related topics, describe my data sample and methods in detail, analyze my results, then conclude with discussion of limitations of this study and suggestions for future lines of inquiry.

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[1] In accordance with the language used in my data, I use to term "American Indian" throughout this paper to refer to indigenous peoples of the United States, including Alaska Natives (Aleut, Eskimo). I chose this terminology for the sake of consistency, and not as a political statement. Please consider it interchangeable with terms such as "Native American" or "Indigenous." Further, I want to emphasize that

REVIEW OF EXISTING LITERATURE

As mentioned above, much has been written about the health disparities suffered by minorities, and American Indians in particular. In the following section, I review scholarship pertaining to these disparities, as well as discuss the changing rates of intermarriage in the United States. I finish with a discussion of the work that has been done to study the relationship of interracial marriage and health. While a few scholars have noted the potential risk of psychological stress (and subsequent poor health) associated with interracial marriage (or, more broadly, with being a minority in the United States), it seems equally plausible that marriage into a race group with better socioeconomic outcomes might result in benefits to health. No studies to my knowledge have attempted to quantify the correlation between interracial marriage for minorities and an overall health outcome like self-rated health.

A large motivator for this study is the persistent rate of poor health outcomes for American Indians in the United States. Numerous scholars examining topics ranging from infant health to addiction to heart disease and diabetes have noted these poor outcomes in the last 10 years. American Indian experience disparities in infant and child health, including high numbers of deaths on average in all five leading causes of infant death (MacDorman 2011: 205) and infant mortality rates that consistently remain 1.5 to 2 times higher than those for whites (Gaudino, Jr. 2008: 13) despite declines in infant mortality in general (Rossen and Schoendorf 2014). Similar disparities exist in nearly all realms of health. American Indians have lower life expectancies, and die more frequently from tuberculosis, alcoholism-related illnesses, diabetes, and heart disease than other Americans (Wright 2009, Holm et al 2010, Veazie et al 2014). Additionally, risk factors for illnesses like heart disease and diabetes are much more prevalent in American Indian populations (Holm et al 2010, Veazie et al 2014).

There is no doubt that this population suffers from worse health outcomes that their white counterparts; however, there exists only a limited understanding as to why the poor outcomes persist. The challenge of addressing disparities in health for American Indian people may have much to do with the fact that they comprise such a small part of the population in an increasingly culturally-diverse nation (Castor et al 2006, Holm et al 2010). American Indians make up only about 1% of the US population and increasingly reside all over the nation, not exclusively on reservations (Holm et al 2010: 69). Accordingly, the lack of improvements to health may be related to an inability to reliably identify American Indians and, more importantly, to an inability to build comprehensive understandings of the factors affecting American Indian health outcomes as this population becomes increasingly more spread out, urban, and diverse (Castor et al 2006, Holm et al 2010). So, while disparity is observed, it seems that the role that cultural assimilation might play in this disparity is often ignored.

Developing an understanding of the implications of assimilation becomes increasingly important in this context. I want to begin by clarifying the definition of "assimilation" that this paper depends on. As cited by Henry-Sanchez and Geronimus (2013), Portes and Zhou (1993) define "traditional assimilation" as the process by which "immigrants become part of the dominant culture and reap the benefits of upward mobility." In short, assimilation comprises a person adopting the practices of a socially dominant culture and experiencing the respective structural benefits. While Henry-Sanchez and Geronimus (2013) apply this understanding of cultural assimilation to the racialization of Latinos in the United States, it is nonetheless applicable here. Rather than apply the concept of assimilation to an immigrant population, I depend on minorities' (and specifically American Indians') intermarriages with *whites* as a measure of assimilation. This proxy is admittedly imperfect; marrying outside of one's own

racial group does not signify abandonment of past practices and adoption of totally new practices. Nonetheless, because modern marriage is both voluntary and demanding of some level of integration and acceptance within a spouse's social and racial group, it accordingly seems like an acceptable proxy for assimilation. As I will show next, scholarship pertaining to both cultural assimilation and interracial marriages suggests that these processes could be either advantageous or damaging to the health of individuals involved. Striving to better understand the relationship between interracial marriages and health outcomes is valuable in its potential to foster better understanding of the ways that American Indians are assimilating in the United States.

It is best not to shy away from the fact that this topic is politically charged. This paper takes as a driving political and ideological perspective that in the United States, "white culture" is the "dominant" culture. As Jones et al (2008) mention, "being socially assigned as [w]hite is associated with large and statistically significant advantages in health status" in the United States (501).[2] This position should not be misconstrued as a suggestion that "white culture" is preferable or superior, or that traditional assimilation, rather than equality, should be a policy goal. Rather, I posit that white people experience health advantages not enjoyed by non-white folks (Jones et al 2008). In the context of this study and the nation, "white culture" is the dominant group into which minorities assimilate and which provides the structural benefits of assimilation as mentioned above.

As Henry-Sanchez and Geronimus (2013) also note in their research, individuals' incorporation into such hierarchical racial categories as whiteness "shapes their lives in

[2] It should be recognized that Jones et al (2008) are focused on the specific social benefits and consequences not of *identifying oneself as white*, but of *being socially categorized as white*. Nonetheless, racial self-identification and social identification frequently overlap, and this nuance does not lessen the significance of the fact that whites experience structural advantage.

consequential ways [. . .]" (207). Accordingly, we must consider that these racial categories (while politically and socially constructed, and theoretically arbitrary) have potential to significantly impact health outcomes. Assimilation into a *different* racial category has potential to impact health, and in the context of this study, assimilation into *white* culture has potential to provide structural benefits in the form of better health outcomes.

I hope that my analysis of interracial marriage can shed some light on how increasing diversity and, accordingly, increasing cultural assimilation plays a role in health for minorities and American Indians especially. Aside from increased dispersion by American Indians in recent years, higher rates of intermarriage are making an understanding of cultural assimilation similarly more important. Between 1980 and 2010, the rate of intermarriages in the United States increased from 3.2% of all marriages to 8.4% (Afful et al 2015:660). Though interracial marriage remains relatively rare, the modern increase in intermarriages has precipitated increased curiosity about the impacts of interracial marriage and cultural assimilation on health.

Henry-Sanchez and Geronimus (2013) and Jones et al (2008) discuss cultural assimilation as beneficial to the assimilating minorities through adoption of structural benefits. By contrast, Williams et al (2003) and Bratter and Eschbach (2006) discuss how perceptions of racism or discrimination, and particularly the social disapproval perceived by individuals in interracial marriages, contribute to psychological stress and may ultimately result in risky, unhealthy practices.

With these implications in mind, developing an understanding of the correlation of interracial marriage and health outcomes appears increasingly important. We must question the multiple, nuanced factors that historically and currently play into American Indian (and minority) health, including the role of assimilation, and explore new policies that might take all

of the factors into account. These policy suggestions, however, are beyond the scope of this study. Rather, this paper seeks to expose whether any correlation exists between American Indians' poor overall health outcomes and their intermarriages with whites. In the following sections, I examine this question as well as extending it to other minorities in the United States. I show that while no statistically significant correlations exist for American Indians in the sample, minorities intermarried with whites, as a whole, experience better health outcomes than their endogamously married counterparts.

DATA

The following sections provide details of my data sample and pertinent descriptive statistics, followed by a detailed description of the methods used in my analysis. This paper depends on data from the 2000-2015 Integrated Public Use Microdata Series (IPUMS) Current Population Survey (CPS). Specifically, I utilize data provided in the Annual Social and Economic Supplement (ASEC), conducted every March. The ASEC supplement is particularly useful for this analysis because it includes healthcare and labor information as well as a variable describing self-rated health. For this variable, subjects' health is recorded in one of five categories, ranging from "Excellent" to "Poor." While self-rated health could be criticized as an arbitrary measure, Antman et al (2015) note that "this measure has been shown to track results using more objective health outcomes[,]" and is a reliable predictor for subsequent health problems and mortality (6). For my analysis, health status is regrouped into a "poor health indicator," with "Excellent," "Very Good," or "Good" responses being coded as a zero (0), and "Fair" or "Poor" responses coded as a one (1).[3]

[3] This coding of a "poor health indicator" to include people in "fair" health is consistent with existing literature in the field (Antman et al 2015: 6). Please note that for the remainder of this paper, a mention of "poor health" exists in this binary, and accordingly includes those reporting "fair" health in the original sample.

To facilitate my analysis, this sample includes only heterosexual married couples between the ages of 18 and 79 living in single-family homes. This sample of 1,160,768 people therefore includes exactly 50% males and 50% females. From there, each individual was filtered into one of six mutually exclusive, exhaustive racial/ethnic categories: White (72.43%), Black (6.85%), American Indian/Alaska Native (0.81%), Asian/Hawaiian/Pacific Islander (5.42%), Other or Multiple races (1.20%), or Hispanic (13.30%). Consequently, all people who indicated race as well as a Hispanic identity were coded only as Hispanic, and any respondent who reported multiple races was similarly coded exclusively in the "Other or Multiple races" category.

This sample is consistent with health and intermarriage expectations in several key areas. As shown in Table 1, most non-whites (and American Indians in particular) reported poor health more frequently than whites. Notably, nearly 20% of American Indians in the sample reported poor health, as compared to only 11% of the total sample in poor health. Also consistent with literature is the low rate of interracial marriages among my sample. As a whole, interracial marriages accounted for only 8.7% of marriages in the sample, which is only 0.3 percentage points higher than the national average in 2010. All racial groups except American Indians were upwards of 80% endogamous (married within their own racial group). By contrast, only 52.46% of American Indians in the sample also had American Indian spouses. These statistics are shown in more detail in Table 2.

METHODS

As discussed above, my own analysis aims to better understand the health outcomes of cultural assimilation by examining health of minorities in interracial marriages with whites.

While I was specifically curious to analyze these outcomes for American Indians married to whites, I expanded my research to include other minority populations in the sample.

To examine the relationship between intermarriage and poor health, I employ a linear probability model, where the probability that an individual in the sample reports poor health (or the probability that the dummy variable $poorhealth = \text{"yes"} = 1$ is given by:

$$Pr(poorhealth_i = 1) = \alpha + (\beta_{spousewhite} * spousewhite) + \beta(X_i') + \varepsilon_i \ ,$$

where $spousewhite$ is a dummy variable with value "1" when the individual's spouse is white (so, when they are intermarried), and $\beta_{spousewhite}$ accordingly gives the marginal change in probability of reporting poor health associated with having a white spouse. $\beta(X_i')$ represents a list of variables for each individual and their respective coefficients.

My work with this data consisted of several phases of analysis, the details of which are described in the next section. I start with simple regressions of $poorhealth$ on $spousewhite$ within several minority groups (American Indians, Asians, blacks, and Hispanics). For these regressions, I segmented the sample to include only individuals of the specified minority group with white or same-race spouses. I expected that all groups would be less likely to report poor health when married to whites versus spouses of their own race. Surprisingly, this did not hold true across all groups. I next deepened my analysis within each of the four segments, applying a list of basic controls for age, sex, employment status, socioeconomic status (represented by inflation-adjusted household income, measured in thousands of 2015 dollars), insurance coverage, urban status, region, and year. Regional divisions included: "New England,"[4] "Middle Atlantic,"[5] "East North Central,"[6] "West North Central,"[7] "South Atlantic,"[8] "East South

[4] Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
[5] New Jersey, New York, Pennsylvania
[6] Illinois, Indiana, Michigan, Ohio, Wisconsin

Central,"[9] "West South Central,"[10] "Mountain,"[11] and "Pacific."[12] These regional controls were applied along with year-by-year controls to every regression following all other controls to ensure that regional and annual factors were not driving the results.[13] I completed my analysis by examining all minorities together in a joint sample with all controls. Results of my analysis are discussed in detail in the section that follows.

RESULTS

Interracial marriage with whites does *not* appear to have a significant impact on health for American Indians in my sample as I expected it would. Nonetheless, for the three remaining segments (Asians, blacks, and Hispanics), marriage to a white spouse is correlated with statistically significant decreases in probability of poor health. Similarly, minorities intermarried with whites as a whole are statistically less likely to report poor health outcomes than those married within their racial group: in other words, minorities married to whites enjoy better health outcomes than their counterparts in endogamous marriages.

The outcomes of regressions run for the American Indian segment of the sample are shown in Table 3, including coefficients for all variables included in the regression. While I do not address the regressions for each race segment in such detail, I think it is particularly important in this case. American Indians were the only group for which having a white spouse did not appear to have a significant correlation with health outcomes at any level. As can be

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[7] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
[8] Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
[9] Alabama, Kentucky, Mississippi, Tennessee
[10] Arkansas, Louisiana, Oklahoma, Texas
[11] Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
[12] Alaska, California, Hawaii, Oregon, Washington
[13] Other than within the American Indian subgroup (where these controls effected the sign of the coefficient on having a white spouse), changes never effected the signs of the coefficients, nor did they effect the magnitude of coefficients or their standard errors by more than ± 0.75 percentage points.

observed in Column (1) of Table 3, with no other controls applied, having a white spouse is correlated with a decrease in probability of reporting poor health for American Indians, but not at a statistically significant level.

For American Indians, factors like level of education, household income, and employment status bear a more significant relationship with poor health; better outcomes in these areas are associated with significantly lower likelihood of a poor health outcome. For instance, coefficients in Column (6) show that incremental increases in educational attainment are associated with lower probabilities of reporting poor health. It is worth cautioning readers here against interpretation of these associations as causal; rather, these coefficients describe correlations. Secondly, interpretation of the coefficients on these controls is not always as straightforward as that for having a white spouse. For instance, the coefficients on levels of educational attainment give the change in probability of reporting poor health in comparison to an individual with a value of "0" for all education categories (in this case an individual with no high school diploma); an American Indian with some type of graduate degree is about 9 percentage points less likely to report poor health outcomes than an American Indian without a high school diploma, holding all the other variables in the model equal. Similarly, employed individuals are 17.6 percentage points less likely to report poor health than their unemployed counterparts. Finally, $1000 increases in household income for this group are associated with about a 0.05 percentage point decrease in probability of reporting poor health.

The variable $hcovany$ also merits mention here. $hcovany$ is a dummy variable with a value of "1" indicating that the individual has some type of healthcare coverage. Instead of showing a negative coefficient as I expected it would, $hcovany$ has a positive coefficient for nearly all regressions in which it is included. This suggests that possession of health insurance

coverage *increases* an individual's probability of reporting poor health. While this is counterintuitive, there are a few theoretical explanations. For one, it is possible that those people who depend on insurance the most - for instance, people who are chronically ill - are also more likely to be in poor health. In other words, we see a positive correlation between health insurance and poor health in this sample because people with poor health need insurance more than healthy people, and are accordingly more likely to have it. It is also possible than access to healthcare makes even healthy people more aware of small health problems, and more likely to report poor health. If an individual receives checkups at a regular interval through her insurance and her doctor consistently reminds her that she has high cholesterol, she may be more likely to report a lower level of health, even if she is equally as healthy as someone else who, for lack of insurance and regular checkups, is blissfully unaware of her high cholesterol.

The variability of results for American Indians across multiple regressions is frustrating. As can be seen in the first row of Table 3, the coefficient on $spousewhite$ even changes sign as basic controls are added. This may occur as a result of the small sample size as compared to the rest of the populations in the sample. Alternatively, American Indians marrying whites could indeed be suffering psychological stress and consequently experiencing increases in probability of reporting poor health. However, the low significance of these outcomes, in statistical terms, makes a definitive answer difficult. The results in Table 3 make clear that within this sample, health outcomes for American Indians are much more related to measures like income, employment, and education than to having a white spouse or having healthcare coverage.

Results for other minority groups were, thankfully, more significant and consistent. For Asians and Hispanics, having a white spouse is correlated with 1.6 and 1.3 percentage point decreases (respectively) in probability of reporting poor health. These results can be found in

Column (3) of Table 4 under the Hispanics and Asians categories. For blacks, with no controls applied, having a white spouse appears to decrease probability of displaying poor health by 6 percentage points. However, with controls applied, *spousewhite* does not explain variation in the outcome at a statistically significant level. Simplified regression results for these groups compared to American Indians appear in Table 4.

While having a white spouse is statistically significantly correlated with the health outcomes for Hispanics and Asians, factors like age, employment status, and educational bear more consistent significant correlations. Detailed regression results for Asians (Column (2)), blacks (3), and Hispanics (4), as compared to American Indians, are shown in Table 5. For all races, an additional year of age is correlated with 0.4-0.6 percentage point increase in probability of reporting poor health. Employment accounts for a much larger change; being employed is correlated with anywhere from an 8.9 (Asians) to a 20.7 (blacks) percentage point decrease in probability of reporting poor health. Additional levels of educational attainment also show large coefficients for all races. These range from about a 2 percentage point negative change for a high school diploma (Column (4)) to a 14.5 percentage point negative change for a graduate degree (Column (3)). While the magnitude of the coefficients on variables like age, employment, and education often exceeds those for having a white spouse, it should be reiterated that having a white spouse (for Asians and Hispanics) nonetheless shows a statistically significant correlation with lower probability of reporting poor health.

To conclude my data analysis, I ran the same regressions on a joint sample of all minorities that made up my American Indian, Asian, black, and Hispanic segments.[14] Summary

[14] Because of the multitude of racial classifications included in my variable for "Other or Multiple Races," individuals who indicated a combination of races have been excluded from this joint sample. Only those falling within one of the four previous categories (American Indian, Asian, black, and Hispanic) are included.

results of these regressions can be found in Table 6. With all controls applied, interracial marriage with whites is correlated with a 1.7 percentage point decrease in probability of reporting poor health as compared to endogamously married minorities. Basic controls for age, sex, employment, educational attainment, urban status, income, and health coverage are also observable in Table 6, but are not the focus of this study. Additionally, these regressions included interaction terms for sex and having a white spouse, which were found to be statistically insignificant.

As a whole, minorities experience better health outcomes when married to whites versus people of their own racial groups. While this relationship was not found to be statistically significant for American Indians or blacks in the sample, it is consistently statistically significant for minorities as a whole. Again, this should not be interpreted as a causal relationship, but is interesting and significant in the context of increasing diversity, cultural assimilation, and health outcomes for minorities in the United States.

LIMITATIONS AND EXTENSIONS

Admittedly, the applicability of this analysis is limited. As discussed above, the ambiguous results for American Indians in the sample prohibit a concrete conclusion as to the correlation of interracial marriage and health outcomes for this group. As with any statistical research, my work would likely have benefitted from a larger sample.

Similarly, the model offers no absolute means of pinpointing cultural assimilation as the element influencing health outcomes for minorities in interracial marriages with whites. While I controlled for many physical, social, and economic factors, my model cannot account for other unobserved factors. Healthier people, for example, might be more likely to self-select into

marriage, and might also be more likely to be white as a result of structural factors. My model does not measure how factors like this might contribute to outcomes for minorities.

It was also impossible within my sample to differentiate between the more than 500 American Indian nations in the United States. These groups have different languages, cultures, traditions, and practices that cannot be summarized with just regional controls, and these differences likely contribute to health outcomes. Extensions of this project should certainly attempt to analyze nation-level information for American Indians, as well as considering in more depth the impact that urban living might have on American Indians' health and access to health coverage.

Similarly, self-rated health, despite representing more quantitative health measures very well, is only one measure. It might give a fairly good picture of an individual's current status, but additional parameters could help foster more complex understandings of the specific ways that intermarriage and cultural attrition are related to health. Future research should focus on parameters like mental illness, psychological stress, or depression that might be more directly correlated with the social and cultural work of assimilation. Self-rated health cannot capture nuanced mental and psychological issues that might be the root of health problems associated with endogamous marriage; future work should attempt to understand the causes, not quantify the symptoms.

CONCLUSION

I started this project with an interest in the inordinately poor health outcomes for American Indians as compared to others in the United States. Analysis of these outcomes in relation to American Indians' interracial marriages to whites proved inconclusive. Despite the ambiguous outcomes for American Indians, my results showed a low-level but significant

negative correlation between minority marriages to whites (as compared to endogamous marriages) and a lower probability of poor health. Controls for physical, socioeconomic, and environmental factors suggest that this correlation is also statistically significant at the population level (although this should not be interpreted as proving causality). So, assimilation into white culture appears to be correlated with better health outcomes for minorities, although my model cannot definitively prove that these changes are the result of a feeling of cultural belonging as opposed to the result of socioeconomic privileges of "belonging" to a specific racial group. As mentioned above, further analysis of specific health measures like mental illness, psychological stress, or depression in the context of interracial marriage could be highly useful in understanding the complex process of social and cultural assimilation.

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Table 1:
Percentage by Race Group with Poor Health Indicator

	Poor Health=0 ("no")	Poor Health=1 ("yes")
Whole Sample	**89**	**11**
American Indian or Alaska Native	80.69	19.31
Asian	90.3	9.7
Black	82.47	17.53
Hispanic	87.19	12.81
White	90.04	9.96
Other or Multiple Races	83.9	16.1

Data: 2000-2015 CPS-ASEC

Table 2:
Percentage Endogamous versus Intermarried with White Spouses, by Race

	Endogamous	Intermarried with White Spouses
Whole Sample (excluding "Other or Multiple Races")	**91.3**	**3.51**
American Indian or Alaska Native	52.46	38.49
Asian	83.08	13.64
Black	91.27	5.56
Hispanic	81.77	15.97
White	94.31	N/A

Data: 2000-2015 CPS-ASEC

Table 3:
Full Regression Results for American Indians (Married to American Indians or Whites)

Variables	(1)	(2)	(3)	(4)	(5)	(6)
spousewhite	-0.0169*	-0.00754	-0.000515	0.00370	0.00160	-0.00627
	(0.00909)	(0.00857)	(0.00862)	(0.00862)	(0.00870)	(0.00910)
Age		0.00499***	0.00493***	0.00514***	0.00505***	0.00519***
		(0.000336)	(0.000338)	(0.000339)	(0.000343)	(0.000346)
Male		0.0111	0.00830	0.00747	0.00737	0.00667
		(0.00855)	(0.00854)	(0.00852)	(0.00851)	(0.00849)
Employed		-0.206***	-0.190***	-0.176***	-0.176***	-0.176***
		(0.00911)	(0.00937)	(0.00956)	(0.00956)	(0.00956)
High school graduate			-0.0553***	-0.0485***	-0.0488***	-0.0501***
			(0.0126)	(0.0126)	(0.0126)	(0.0126)
Some College			-0.0567***	-0.0444***	-0.0454***	-0.0437***
			(0.0141)	(0.0142)	(0.0142)	(0.0142)
Assoc. Degree			-0.0776***	-0.0648***	-0.0656***	-0.0698***
			(0.0168)	(0.0169)	(0.0169)	(0.0169)
Bach. Degree			-0.0962***	-0.0730***	-0.0752***	-0.0759***
			(0.0169)	(0.0173)	(0.0173)	(0.0173)
Graduate Degree			-0.128***	-0.0882***	-0.0901***	-0.0954***
			(0.0216)	(0.0224)	(0.0224)	(0.0225)
HH income, thousands				-0.000487***	-0.000507***	-0.000502***
				(7.36e-05)	(7.44e-05)	(7.49e-05)
Healthcare Coverage					0.0190*	0.0143
					(0.0103)	(0.0104)
Region and Time Controls	No	No	No	No	No	Yes
Constant	0.199***	0.0856***	0.133***	0.139***	0.132***	0.170***
	(0.00590)	(0.0188)	(0.0211)	(0.0211)	(0.0214)	(0.0373)
Observations	7,694	7,694	7,694	7,694	7,694	7,694
R-squared	0.000	0.113	0.120	0.125	0.125	0.133

Data: 2000-2015 CPS-ASEC
Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 4:
Poor Health Regressions, by Race Group

	American Indians Only			Asians Only		
Variables	(1)	(2)	(3)	(1)	(2)	(3)
spousewhite	-0.0169*	0.00160	-0.00627	-0.0270***	-0.0158***	-0.0165***
	(0.00909)	(0.00870)	(0.00910)	(0.00371)	(0.00361)	(0.00364)
All Basic Controls	No	Yes	Yes	No	Yes	Yes
Region, Time Controls	No	No	Yes	No	No	Yes
Constant	0.199***	0.132***	0.170***	0.102***	0.0658***	0.0745***
	(0.00590)	(0.0214)	(0.0373)	(0.00139)	(0.00744)	(0.0111)
Observations	7,694	7,694	7,694	52,930	52,930	52,930
R-squared	0.000	0.125	0.133	0.001	0.092	0.092

	Blacks Only			Hispanics Only		
Variables	(1)	(2)	(3)	(1)	(2)	(3)
spousewhite	-0.0646***	-0.00998*	-0.00439	-0.0458***	-0.0147***	-0.0134***
	(0.00630)	(0.00581)	(0.00588)	(0.00249)	(0.00250)	(0.00252)
All Basic Controls	No	Yes	Yes	No	Yes	Yes
Region, Time Controls	No	No	Yes	No	No	Yes
Constant	0.181***	0.213***	0.180***	0.136***	-0.0262***	0.00901
	(0.00150)	(0.00817)	(0.0123)	(0.00100)	(0.00367)	(0.00690)
Observations	68,905	68,905	68,905	132,553	132,553	132,553
R-squared	0.002	0.170	0.175	0.003	0.118	0.119

Data: 2000-2015 CPS-ASEC
Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1. "All Basic Controls" include all controls found in Table 3: age, sex, employment status, educational attainment, household income, and healthcare coverage. "Region, Time Controls" control for regional and time-dependent factors.

Table 5:
Detailed Poor Health Regressions, by Race Group

	American Indian	Asian	Black	Hispanic
Variables	**(1)**	**(2)**	**(3)**	**(4)**
spousewhite	-0.00627	-0.0165***	-0.00439	-0.0134***
	(0.00910)	(0.00364)	(0.00588)	(0.00252)
age	0.00519***	0.00418***	0.00464***	0.00612***
	(0.000346)	(0.000105)	(0.000113)	(7.23e-05)
male	0.00667	0.0152***	-0.000507	0.0176***
	(0.00849)	(0.00261)	(0.00269)	(0.00184)
employed	-0.176***	-0.0890***	-0.207***	-0.122***
	(0.00956)	(0.00293)	(0.00320)	(0.00204)
hsgrad	-0.0501***	-0.0642***	-0.0899***	-0.0292***
	(0.0126)	(0.00497)	(0.00445)	(0.00220)
somecollege	-0.0437***	-0.0773***	-0.106***	-0.0317***
	(0.0142)	(0.00572)	(0.00495)	(0.00290)
assocdegree	-0.0698***	-0.0903***	-0.117***	-0.0410***
	(0.0169)	(0.00620)	(0.00590)	(0.00389)
bachdegree	-0.0759***	-0.104***	-0.138***	-0.0650***
	(0.0173)	(0.00484)	(0.00537)	(0.00336)
graddegree	-0.0954***	-0.112***	-0.145***	-0.0768***
	(0.0225)	(0.00523)	(0.00624)	(0.00475)
hhincthous	-0.000502***	-0.000158***	-0.000283***	-0.000291***
	(7.49e-05)	(1.32e-05)	(2.00e-05)	(1.40e-05)
hcovany	0.0143	0.000464	0.0120***	0.0236***
	(0.0104)	(0.00402)	(0.00436)	(0.00204)
Region and Time Controls	Yes	Yes	Yes	Yes
Constant	0.170***	0.0745***	0.180***	0.00901
	(0.0373)	(0.0111)	(0.0123)	(0.00690)
Observations	7,694	52,930	68,905	132,553
R-squared	0.133	0.092	0.175	0.119

Data: 2000-2015 CPS-ASEC

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 6:
Poor Health Regressions for all Minorities, as Compared to Counterparts in Endogamous Marriages

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
spousewhite	-0.0436***	-0.0290***	-0.0310***	-0.0209***	-0.0231***	-0.0163***	-0.0195***	-0.0176***
	(0.00186)	(0.00179)	(0.00179)	(0.00181)	(0.00193)	(0.00193)	(0.00264)	(0.00265)
Age		0.00544***	0.00540***	0.00560***	0.00573***	0.00562***	0.00562***	0.00565***
		(5.71e-05)	(5.72e-05)	(5.76e-05)	(6.19e-05)	(6.16e-05)	(6.16e-05)	(6.20e-05)
Male		0.0226***	0.0225***	0.0188***	0.0184***	0.0163***	0.0155***	0.0155***
		(0.00141)	(0.00141)	(0.00141)	(0.00149)	(0.00149)	(0.00161)	(0.00161)
Employed		-0.158***	-0.157***	-0.143***	-0.145***	-0.139***	-0.139***	-0.139***
		(0.00172)	(0.00172)	(0.00174)	(0.00186)	(0.00186)	(0.00186)	(0.00186)
Urban			-0.0556***	-0.0468***	-0.0451***	-0.0388***	-0.0388***	-0.0313***
			(0.00251)	(0.00251)	(0.00262)	(0.00262)	(0.00262)	(0.00268)
HH Income, Thousands				-0.000348***	-0.000371***	-0.000253***	-0.000253***	-0.000248***
				(8.16e-06)	(9.00e-06)	(8.98e-06)	(8.98e-06)	(8.98e-06)
Health Coverage					0.0103***	0.0249***	0.0249***	0.0251***
					(0.00181)	(0.00187)	(0.00187)	(0.00188)
Education Controls	No	No	No	No	No	Yes	Yes	Yes
Male* spousewhite							0.00685*	0.00652*
Region and Time Controls	No	No	No	No	No	No	No	Yes
Constant	0.140***	-0.0101***	0.0420***	0.0459***	0.0369***	0.0544***	0.0546***	0.0531***
	(0.000765)	(0.00279)	(0.00368)	(0.00366)	(0.00389)	(0.00401)	(0.00401)	(0.00640)
Observations	295,005	295,005	293,273	293,273	258,756	258,756	258,756	258,756
R-squared	0.002	0.112	0.114	0.121	0.125	0.131	0.131	0.133

Data: 2000-2015 CPS-ASEC
Note: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1