

Does Multiracial Matter? A Study of Racial Disparities in Self-Rated Health

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Abstract How do self-identified multiracial adults fit into documented patterns of racial health disparities? We assess whether the health status of adults who view themselves as multiracial is distinctive from that of adults who maintain a single-race identity, by using a seven-year (2001–2007) pooled sample of the Behavioral Risk Factor Surveillance System (BRFSS). We explore racial differences in self-rated health between whites and several single and multiracial adults with binary logistic regression analyses and investigate whether placing these groups into a self-reported “best race” category alters patterns of health disparities. We propose four hypotheses that predict how the self-rated health status of specific multiracial groups compares with their respective component single-race counterparts, and we find substantial complexity in that no one explanatory model applies to all multiracial combinations. We also find that placing multiracial groups into a single “best race” category likely obscures the pattern of health disparities for selected groups because some multiracial adults (e.g., American Indians) tend to identify with single-race groups whose health experience they do not share.

Keywords Multiracial · Self-rated health · Health disparities · Race · Identity

Introduction

Studies of racial health disparities are at a crossroads. On one hand, persistent differences in mental and physical health show the many ways that “race matters” for well-being (e.g., Crimmins et al. 2004; Keppel et al. 2002). On the other hand, increasing attention toward identities spanning racial boundaries has caused researchers to question the nature of racial distinctions. Respondents now have the option to report their race in either monoracial or multiracial terms on many health

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surveys and the U.S. census (Sandefur et al. 2004). However, because race is constructed socially as a mutually exclusive marker of identity, individuals may also report one race that “best describes” their background. We ask whether this level of detail—be it selecting multiple races or allocating persons to one self-selected category—shapes patterns of racial difference in health outcomes.

We explore this issue by using a seven-year pooled sample of the nationally representative Behavioral Risk Factor Surveillance System (BRFSS). Since 2001, this survey has allowed individuals to report multiple races, and those who do so have the option to declare a race that “best describes” themselves, referred to hereafter as “best race.” Our sample of nearly 1.8 million cases includes slightly more than 27,000 persons who identify with multiple races. We assess racial differences in self-reported health (SRH), and our investigation proceeds in the following steps. First, we assess racial and multiracial differences in SRH. Second, we explore whether these differences can be explained by a standard set of predictors used to address racial differences in health: demographic, socioeconomic, behavioral, and health status. And third, we reassess SRH by using multiracial individuals’ best-race identification. Our intent is to assess whether health disparities between whites and multiracial persons can be adequately captured by folding multiracial groups into single-race categories.

Race in Health-Disparity Studies: A Construct in Need of Review?

Research tracking racial health disparities has traditionally marked differences among monoracial (i.e., single-origin) groups. However, new approaches to racial data collection (Office of Management and Budget [OMB] 1997) now allow for the inclusion of multiracials¹ into the broader U.S. health profile. According to the 2000 census, 2.4% of the U.S. population identify themselves with multiple racial categories (Jones and Smith 2001). Population projections indicate that this group will have grown to 9% of the population by 2010 (Lee et al. 2002).² Because this group represents the outcome of intimate racial interaction, its size, stability, and well-being also forecast America’s racial future (Hirschman et al. 2000; Lee and Bean 2004). Observing few health disparities between the multiracial and the majority non-Hispanic white population may portend a narrowing of health disparities as races continue to blend. Beyond studying this group’s growth, assessing the dynamics of multiracial adults provides the opportunity to examine a population that has always been present but is only now captured in our data.

Still, incorporating multiracials into a discussion of racial health disparities is complex. As Tashiro (2005:205) argued, they “. . . have not been accounted for in the dominant discourse of race.” Multiracials disrupt the classic health-disparities research approach of contrasting nonwhites to whites by demonstrating that persons may exist “in between” these statuses (Tashiro 2005). This raises two questions for

¹ We elect to use the term “multiracial” to refer to persons of multiple racial origins.

² The base population of multiracials for 2000, which is 22 million, includes persons who indicated multiple ancestries in 1990, their descendants, and the offspring of interracial and interethnic marriages. It is not exclusively those reporting multiple racial categories in 2000 (Lee et al. 2002:245).

the study of race and social inequality. First, are multiracials simply a “new” racial group whose health should be contrasted against the majority race? Second, how do we capture such differences in light of more complex forms of racial classification?

Theoretical Considerations

Racial disparities in disease and mortality, particularly between blacks and whites, are substantial and long-standing (Heron 2007; National Center for Health Statistics [NCHS] 2007a). The sources of these differences have been theorized in both biological and social terms; however, social explanations have been more successful in explaining these differences in light of the crucial importance of social conditions in shaping racial health patterns (Centers for Disease Control and Prevention [CDC] 2004; Frank 2001, 2007; National Research Council 2004; Williams and Jackson 2005; Zuberi 2001). Self-rated health (SRH), the outcome assessed in this article, has substantial racial variation. In 2005, 14.3% of black adults reported that their health was fair or poor, compared with 13.2% of American Indians, 8.6% of whites, and 6.8% of Asians (NCHS 2007a). Past studies have examined a variety of explanations (e.g., health behaviors, mental health) for these differences, most notably socioeconomic status (SES), which is viewed as a “fundamental cause” of health outcomes (Link and Phelan 1995; Phelan et al. 2004). Indeed, racial groups in the United States are strongly stratified along socioeconomic lines (DeNavas-Walt et al. 2007), although adjustment for SES differences fails to fully explain racial differences in SRH (Borrell and Dallo 2008; Read and Gorman 2006; Ren and Amick 1996).

Despite these insights on racial disparities, the place of multiracial persons remains elusive. Analyzing the experiences of multiracial groups augments our understanding of social sources of health disparities by testing whether stressors linked to a particular group (e.g., discrimination against blacks) reflect the degree to which a person is a member of that group. Although it is well-known that races are ethnic and racial amalgams (Nash 1994), they are understood as stand-alone groups with a shared ancestry, history, and common signatures of physicality, including skin color and hair texture (Cornell and Hartmann 2007). There are two possible paths to resolving multiracial status in a world of single-race identification: distinction of the multiracial population itself as either more or less healthy than other groups, and iteration of multiracial health toward the condition of one of their component racial groups.

We turn first to multiracial distinction. Multiracial health was initially conceptualized as distinctly unhealthy. This idea began with early sociological discussion that forecasted a strained health experience for this group (i.e., Park’s “marginal man”) attributable to the unique difficulties of a bicultural existence (Park 1928), and it continues in more recent explorations of the social adjustment of mixed-race adolescents (e.g., Bowles 1993; Gibbs 1989). Some work has found higher rates of problem behavior for this group (Choi et al. 2006; Udry et al. 2003), although others note the disproportionate impact of certain types of mixed-race individuals (Campbell and Eggerling-Boeck 2006). Alternatively, growing evidence suggests that mixed-race persons may be uniquely advantaged either because they develop in relatively advantaged circumstances (Cheng and Powell 2007) or because of their

ability to navigate multiple racial contexts. Park's marginal man thesis also purports that bicultural persons have the ability to be objective outsiders to racial issues (see also Campbell and Eggerling-Boeck 2006; Korgen 1998). Therefore, if the health status of multiracial persons does indeed stand apart from single-race adults, it is not yet clear whether this distinction is positive or negative.

The second path evaluates which group in a mixed-race genealogy most guides the social experiences of multiracial individuals. The racial divide that shapes how individuals are treated reflects separations between singular racial groups (e.g., the black-white divide). Although an individual may identify with a variety of backgrounds, the question remains as to whether their treatment, and thus their social well-being, is reflective of one race-specific pattern. The classic answer evokes what anthropologists refer to as "hypodescent," whereby mixed-race offspring are identified by, and their experiences reflect, the group of least status (Davis 1991). There is some empirical support for this pattern. Collins and David (1993) noted that although biracial white-black infants with black mothers had similar rates of low birth weight as did other infants with black mothers, they had higher rates than did either monoracial or multiracial infants of white mothers. In addition, Udry and colleagues (2003) found that white-Asian and white-American Indian adolescents were more likely than were single-race white adolescents to report fair or poor SRH but statistically as likely as their minority counterparts. While noteworthy, it is unclear what these patterns would look like among adults.

Presuming that the health of multiracial adults mirrors the health of one of their component racial backgrounds yields an alternative expectation stipulating that the health of multiracials of partial white ancestry will iterate toward their white counterparts. Recent theorizing on the changing nature of racial stratification purports that a new structure has emerged, differentiated along the lines of skin color, yielding a space between *white* and the *dark-skinned* minority collective (Bonilla-Silva 2004; Bonilla-Silva and Embrick 2006). Therefore, those of partial white ancestry may have greater access to social mobility than is extended to their minority counterparts. This condition may also extend to the health of multiracial individuals. Although this topic is understudied, evidence exists that white-black and white-American Indian adults are structurally advantaged relative to their minority counterparts (Goldstein and Morning 2002; Jones and Smith 2001). Asians, on the other hand, tend to be structurally advantaged and healthier than whites. Therefore, if multiracial Asians are progressing toward an "honorary white" status, their health would iterate toward that of whites even though this is the less-healthy pattern.

Finally, the health of multiracials may mirror the racial community with which they most closely identify, possibly reflecting the group that they believe they most resemble. Being viewed by others as belonging to a group that is vulnerable to bias, for example, increases the likelihood of experiencing that bias and its related health consequences (Williams and Neighbors 2001). Many multiracial youth identify themselves in monoracial terms (Brunsma 2006; Campbell 2007; Rockquemore and Brunsma 2002) and report comparable experiences of racial discrimination from racial outsiders (Herman 2004). Understanding oneself as a member of a group presumably implies similar exposure to racially specific conditions (e.g., access to material resources) that affect health (Williams and Jackson 2005). However, it is unclear whether an affinity with a specific racial group coincides with similar

race-specific vulnerabilities to disease. Ultimately, understanding *which* racial community a self-reported multiracial person identifies with may provide crucial information in assessing individual health status.

Methodological Considerations

Incorporating the multiracial population into a discussion of social well-being also raises unique methodological questions (see Mays et al. 2003; Sandefur et al. 2004; Snipp 2003). Typically, multiracial persons have been identified as those selecting more than one race (Harris 2002; Morning 2003),³ an option now available on many major health surveys as well as the U.S. census. While providing new complexity, cross-sectional measures of multiracial identity likely underestimate the number of individuals who have *ever* identified as multiracial. Race is generally a stable characteristic within individuals; however, studies show that adolescents reporting multiple races may shift their answer depending on where the question is asked (Brunsma 2006; Harris and Simm 2002) or their age (Doyle and Kao 2007). Notably, Hitlin et al. (2006) found that twice as many multiracial teens shifted between a multiple and single-race classification over a six-year period as have remained stable in their multiracial status. A smaller segment never reported a multiple-race identity but did shift between monoracial categories. This instability may reflect the processes of adolescent identity formation and thus have little effect on studies of adults, or it may represent the actions of recent cohorts who came of age when declaring race became more complex (e.g., 2000 U.S. census). The long-term impact on cross-sectional data will be evident only after this generation ages well into adulthood.

Although a segment of the multiracial adult population is likely missed in cross-sectional databases, using these data to understand the health dynamics of self-identified multiracial adults is warranted. First, the majority of national health surveys employ cross-sectional data, and its use for this group speaks to how the health status of adults is generally tracked. Second, if those selecting multiple races share common health advantages or risk factors, grouping them into single racial groups may make those groups appear either healthier or more at-risk without any change in their health behaviors or disease patterns (Mays et al. 2003). Further, those reporting mixed-race ancestry may positively or negatively select on characteristics pertinent to health outcomes, such as socioeconomic background (e.g., Goldstein and Morning 2002). For example, Hitlin and colleagues (2006) found those shifting between multiple and single categories reported lower self-esteem and hailed from less-advantaged backgrounds than the monoracial population. Brown et al. (2007) also showed that the removal of the “some other race” category at Wave 3 of Add Health (the National Longitudinal Study of Adolescent Health) changed the magnitude—and in some cases the direction—of adolescent racial disparities attributable solely to the reshuffling of individuals into a restricted set of categories. Such a shift influences both our current assessment of race and health as well as our

³ Identifying multiracial persons as those reporting multiple races is only one of several ways to identify this population (cf. Harris 2002 for review).

efforts to bridge racial data across years as we track disparities over time (see Liebler and Halpern-Manners 2008; Mays et al. 2003; Snipp 2003).

Next, we review the three approaches used when analyzing multiple-response race data: excluding the multiple-race population; including multiple-race groups; or allocating multiple-race respondents to a single-race group.

Excluding the Multiracial Population

Although not common, some social science studies have simply removed multiracial respondents from their samples. In their update of segregation patterns, Wilkes and Iceland (2004) excluded those reporting multiple races, arguing that 98% of the U.S. population identifies as only one race and that this removal would have a proportionately small impact on the findings. However, small (absolute or proportionate) population size is not an adequate justification for exclusion because this population is increasing, and findings from health data on small ethnic and racial subgroups (e.g., American Indians, Asians) has become a national priority in order to capture meaningful disparities that would otherwise go unmeasured. Further, the multiracial population represents a substantial share of smaller groups, such as American Indians, because only 60.1% of the American Indian population identifies with just one race (Farley 2002).

Including a Separate Multiracial Group(s)

Grouping those who report multiple races into one catch-all multiracial category or a series of combination-specific categories (e.g., black-white) represents the most common approach. Its clear advantage is the ability to contrast multiracial groups with their monoracial counterparts. For example, both Udry and colleagues (2003) and Campbell and Eggerling-Boeck (2006) found that white-American Indian adolescents stand out relative to single-race whites for a variety of negative health outcomes. These comparisons provide insight into disparities that might otherwise be overlooked if these groups were folded into one category.

Allocating Multiracial Respondents to One Self-Selected Single-Race Category

Lastly, persons reporting multiple races may be allocated into one self-selected single-race group. For multiracial respondents, many social and health surveys also ask, “Of the races you selected, which race best describes you?” This improves upon the U.S. census strategy of allocating respondents to one minority population (Goldstein and Morning 2002; OMB 2000) by honoring the principle of self-identity (Mays et al. 2003; Snipp 2003) and not simply following a strategy of hypodescent. However, this approach typically employs a restricted set of single-race options. Additionally, no consensus exists on what impact folding multiracial populations into single-race categories has on either the aggregate health profile of single-race groups or our ability to track the health of the multiracial respondents themselves (Mays et al. 2003). The determining factor is whether those who select one race after identifying multiple racial categories—as opposed to solely reporting that race—have health that is systematically different than that of their single-race counterparts (Snipp 2003).

Research Questions and Hypotheses

Because capturing racial disparities hinges upon how people identify themselves, we asked whether acknowledging a multiracial identity through the use of multiple-response race data would change our understanding of U.S. racial health disparities. We began by contrasting the health of racial populations through the use of both single-race and multirace classifications. We then adjusted for background controls to explore whether the explanatory mechanisms that are often applied to single-race health disparities operate in a similar manner for multiracial adults.

H₁: Upward iteration. The health of multiracial respondents who cite a partial white identity is between white and the minority component race (e.g., black-white health is between the health of blacks and whites). The health of those citing a dual minority identity will be similar to the most-advantaged minority component group.

H₂: Hypodescent. The health of multiracial respondents who cite a partial white identity is similar to their minority component race (e.g., black-white health is similar to that of blacks). The health of those citing a dual minority identity will be similar to the least-advantaged minority component racial group.

H₃: Multiracial distinction. The health of multiracial respondents, on average, will be *better* or *worse* than both component groups.

Next, we ask whether allocating multiracial adults to the race that “best describes” their identity accurately represents their health experience. We begin by first reclassifying multiracial respondents into their best-race category and then contrast the SRH of these respondents with their single-race counterparts. This shows to what degree folding these groups into their single best race, as is suggested by some (e.g., Mays et al. 2003), obscures health profiles.

H₄: Best-race identification. The health of multiracial respondents will echo the racial group that they claim best describes their identity.

Data and Methods

Data

We draw on data from the 2001–2007 waves of the BRFSS, an ongoing collaborative project between U.S. states and territories and the Centers for Disease Control and Prevention (CDC). The BRFSS is designed to assess behavioral risk factors and preventive health practices that are linked to chronic diseases, injuries, and preventable infectious diseases in the adult population (aged 18 and older). Households with telephones in each state or U.S. territory were selected via a disproportionate stratified sample design, based on areas with a high or low density of telephone numbers. Respondents were then selected based on a random sample of one adult per household, using a computer-assisted telephone interviewing (CATI) system.

We use information from the core component of the BRFSS questionnaire, which asks a standard set of questions of respondents in all U.S. states and territories and includes demographic measures in addition to current health-related perceptions, conditions, and behaviors. Since 2001, respondents have had the option to select more than one racial group (“Which one or more of the following would you say is your race? Mark all that apply.”). Those reporting more than one race then identify a single racial category (“Which one of these groups would you say best represents your race? white, black or African American, Asian, Native Hawaiian or Other Pacific Islander (NHPI), American Indian, Alaska Native, and Other Race”). Those who do not report a best race are coded as having “no best race.”

Our initial merge of the 2001–2007 waves gives us a sample size of 2,171,714 respondents, which we limit based on several criteria. First, we exclude respondents who were living outside the 50 U.S. states—specifically, in Puerto Rico, Guam, or the Virgin Islands (remaining $n=2,121,979$). Second, we remove Hispanic respondents (remaining $n=1,982,115$). Although Hispanic is an ethnic category as opposed to a “race,” these distinctions appear to be less meaningful for respondents themselves. Hispanics are most likely to report “some other race” (Rodriguez 2000) or vary their racial reports, depending on the context where the question is asked (Eschbach and Gomez 1998; Hitlin et al. 2007). Patterns indicate that “Hispanic” is actually a more salient identity label than any available racial categories (Campbell and Rogalin 2006; Hitlin et al. 2007), yet the BRFSS provided no option to indicate “Hispanic” as the group that best describes an individual. In light of these issues, we follow the logic of other work on multiracial populations (e.g., Campbell and Eggerling-Boeck 2006; Harris and Simm 2002) and omit Hispanics from the sample. Third, we limit the sample to respondents who had selected either one or two racial groups in a group that made up at least 1,000 cases in the sample (multiracial $n=27,302$; remaining sample $n=1,965,664$).⁴ Last, we limit our sample to cases with valid information on included measures, resulting in our final sample size of 1,798,701 adults.⁵

Dependent Measure

Our dependent measure is self-rated health. All respondents were asked to rate their general health on a five-point scale, where 1 = poor and 5 = excellent. We recode this measure into two categories that contrast bad health (1 = poor or fair) against good health (0 = good, very good, or excellent). We employ this dichotomous version to examine the conditions that result in the most problematic outcome from a health standpoint. This is an important distinction because studies consistently find SRH to be a strong, independent predictor of morbidity and mortality (Idler and

⁴ Multiracial adults compose 1.5% of our sample; this is somewhat lower than the U.S. census estimate of 2.4% for the multiracial population. However, we exclude adults with three or more racial identities, and we restrict our sample to persons aged 18 and older. As census data indicate that the multiracial population is disproportionately young when compared with the entire population (see Jones and Smith 2001), this restriction contributes to the lower proportion of multiracial respondents in our sample.

⁵ Compared with respondents in the original sample, excluded respondents are slightly younger and include more females and nonwhites.

Benyamin 1997); those who rate their health poorly experience a heightened risk of serious, life-threatening illness.⁶

Independent Measures

Our main independent measure captures racial identity and includes six single-race groups: white (reference), black, Asian, NHPI, American Indian/Alaskan Native, and other. It also includes seven multirace groups: white-black, white-Asian, white-NHPI, white-American Indian, white-other, black-American Indian, and Asian-NHPI.

Control measures are clustered into four groups: demographic characteristics, SES, health behaviors, and health problems. Demographic characteristics include gender (1 = female, 0 = male), age at interview (continuous), the number of adults living in the home (none = 0 [reference], 1, and 2 or more), the presence of children younger than age 18 in the home (1 = yes, 0 = no), and marital status (married [reference], member of an unmarried couple, divorced or separated, widowed, and never married). We also control for Hawaii residence (1 = lives in Hawaii, 0 = other) because the high frequency of interracial marriage and multiracial identification in this state provides a distinctive context for multiracial identity (see Kana'iaupuni and Liebler 2005), which may confound observed patterns for multiracial respondents living in other parts of the United States.

We also include five measures of SES, including the highest grade of school completed: less than a high school diploma (reference), high school graduate or GED, attended college/technical school but did not graduate, and graduated from college/technical school. Annual household income (dollars, U.S.) is an ordinal measure: <\$25,000 (reference); \$25,000–\$49,999; \$50,000–\$74,999; \$75,000 or more; and missing on income (11.8% of respondents did not provide valid information on this measure [not shown]). Current employment status contrasts those working for salary/wages or self-employed (reference) with persons unemployed, homemakers, students, retired, or unable to work. We also include two measures gauging medical care access: whether respondents have any form of medical insurance (1 = yes, 0 = no) and whether they have at least one person whom they regard as their personal doctor or health care provider (1 = yes, 0 = no).

Health behavior measures include current smoking status, contrasting respondents who never smoked (reference) with former smokers, persons who smoke on some days, and those who smoke every day. We also include a measure of whether respondents drink heavily on a daily basis (1 = yes, 0 = no), with heavy drinking defined as more than two drinks per day for men and more than one drink per day for women. The BRFSS data set also includes a constructed measure of body mass index (BMI), derived from respondent weight and height, that places respondents into one of three weight categories as defined by the World Health Organization (1995): neither overweight nor obese (BMI < 25 [reference], which we refer to as normal weight), overweight (25 ≤ BMI < 30), and obese (BMI ≥ 30). In addition, we

⁶ In supplemental analyses (not shown), we replicated our analyses by using the continuous version of SRH with ordinal logit models. The findings were very similar to those reported for the dichotomized version of fair-to-poor SRH.

control for whether respondents had participated in any exercises (e.g., running, calisthenics, walking) during the past month (1 = yes, 0 = no).

Last, we control for two chronic health problems that vary strongly across racial groups (CDC 2003a, 2003b) and likely contribute to racial disparities in SRH. We construct a measure of current asthma, where 1 = respondent has ever been diagnosed with asthma and has it now, and 0 = does not have asthma. We also include a measure of whether adults have ever been told by a doctor that they have diabetes (1 = yes, 0 = no).

Analysis

All analyses are conducted by using the SAS software package (version 9.1), including adjustments for the complex sample design of the BRFSS (i.e., a disproportionate stratified sample, which resulted in clustering based on state of residence, substate region, and areas with a high versus low density of telephone numbers). Analyses are also weighted with the final sampling weight, which we adjust to account for the number of waves included in our analytic sample (see NCHS 2007b).

Our analysis proceeds in three steps. First, we present sample characteristics and the SRH profile of adults across single-race, multirace, and best-race groups. Following, we present logistic regression models that examine whether demographic, socioeconomic, health behavior characteristics, and health-problem characteristics explain race-specific differences in SRH. Second, we restrict our sample to multiracial adults and cross-tabulate our multirace measure with best race to see where these adults cluster when they are asked to choose a single race. Third, using best-race groups, we observe how SRH patterns shift when multiracial respondents are placed within a single-race measurement framework (see Brown et al. 2007 for a similar assessment).

To pull in enough multiracial respondents to support the analyses included in this article, we aggregate several years of the BRFSS data. As a result, our sample size is well over 1 million. We recognize that tests of statistical significance are influenced by sample size, but rather than report only p values less than .001, we still report .01 and .05 levels of significance because this follows conventional norms and provides more detail to the reader on the nature of the relationships we are exploring. However, we do view .05 cut points for p values as evidence of marginal significance. Throughout this article, we try to emphasize effect sizes in our discussion, rather than relying too strongly on the reporting of significance tests.

Results

Descriptive Statistics

Table 1 presents descriptive characteristics of our sample. Overall, 14.4% report that their health is fair to poor. This is slightly lower than the 16.4% estimate reported elsewhere (CDC 2008), but the composition of their BRFSS sample differs from ours somewhat. The average age of our respondents is 46.7 years, the majority are

Table 1 Sample characteristics, BRFSS adults 2001–2007 ($n=1,798,701$)

Variable	% or Mean
Fair to poor self-rated health (%)	14.4
Demographic Measures	
Age, mean (SD)	46.7 (17.1)
Female (%)	51.0
Marital status (%)	
Married	60.4
Unmarried couple	3.1
Divorced or separated	11.6
Widowed	7.0
Never married	17.9
Other adults in household (%)	
None	18.3
One	58.1
Two or more	23.7
Any children in household	39.5
Lives in Hawaii	0.2
Socioeconomic Measures	
Completed education (%)	
< High school	8.4
High school graduate	29.9
Some college	27.6
College graduate	34.1
Annual household income (%)	
<\$25,000	21.0
\$25,000–\$49,999	26.7
\$50,000–\$74,999	16.5
\$75,000 and above	24.3
Missing	11.4
Employment status (%)	
Employed	61.8
Unemployed	4.8
Homemaker	7.1
Student	4.4
Retired	17.5
Unable to work	4.5
No medical insurance (%)	12.1
Has a personal doctor (%)	82.9
Health Behaviors	
Smoking status,(%)	
Never smoked	52.8
Former smoker	25.5
Smokes some days	5.1

Table 1 (continued)

Variable	% or Mean
Smokes every day	16.6
Heavy drinker (%)	5.5
Body Mass Index (%)	
Normal weight	40.2
Overweight	36.4
Obese	23.4
Any exercise (%)	77.6
Health Problems	
Diabetes (%)	8.0
Asthma (%)	8.1

married, and nearly 40% have children living in their household. Just more than one-third have a college degree, more than 60% are employed, and more than four-fifths reported that they have a personal doctor. Approximately one in five respondents live in a household with a yearly income less than \$25,000, and 12% lack health insurance. In terms of health behaviors and status, just over one-half of the sample never smoked cigarettes, just over three-quarters reported that they had exercised within the past month, only 5.5% reported heavy drinking, and approximately 8% reported that they have asthma or had been diagnosed with diabetes. The majority of sampled adults, however, are overweight or obese (36.4% and 23.4%, respectively).

In Table 2, we show the sample size and the percentage of the respondents reporting fair to poor health, by reported race(s) of the respondent. The top two panels show patterns by responses to the first race question (single-race adults in Panel A, multiracial adults in Panel B). Panel C reallocates multiracial respondents into their best-race categories. To examine the place of multiracial adults in a picture of racial health disparities, we present two sets of significance tests in Table 2. First, we test whether the SRH status of each racial group included in Panels A, B, and C differed from that of single-race white adults (in Panel A), denoted with asterisks. Second, we contrast each multiracial group (in Panels B and C) against their nonwhite single-race component group listed in Panel A (e.g., we contrast white-black adults against single-race black adults, multiracial respondents choosing Asian as a best race against single-race Asians), denoted with superscripts.

In general, we find that most groups (single race or multirace) rank their health, on average, significantly poorer than do whites (13.5% of whom report their health as fair to poor). Among single-race groups, American Indians report the greatest health disparity from whites, with nearly one-quarter (24%) reporting their health as fair to poor. Blacks and “others” report statistically higher rates of fair to poor SRH: 19.9% and 18.4%, respectively. The solid exceptions are single-race Asians, who are the least likely to report fair to poor SRH (8.7%); and NHPI adults, who also report a relatively low, although not significantly lower, rate of fair to poor SRH (11.8%) compared with whites.

Table 2 Self-rated health status for sample adults, by race

	Sample Size	Fair to Poor Self-Rated Health (%)
Panel A: Single-Race Adults		
White	1,550,837	13.5
Black	144,607	19.9***
Asian	31,170	8.7***
Native Hawaiian/Pacific Islander (NHPI)	4,403	11.8
American Indian	28,480	24.0***
Other	11,902	18.4***
Panel B: Multiracial Adults, Specified Identity		
White-black	2,268	13.4 ^a
White-Asian	2,266	7.8**
White-NHPI	2,068	14.7
White-American Indian	16,071	25.7***
White-other	1,655	18.5**
Black-American Indian	1,523	27.0*** ^a
Asian-NHPI	1,451	12.0
Panel C: Multiracial Adults, Best Single-Race		
White	16,839	21.9***
Black	2,345	18.2***
Asian	1,401	8.3*
Native Hawaiian/Pacific Islander	1,657	12.4
American Indian	2,590	30.2*** ^b
Other	389	16.5
No best single-race	2,081	20.3***

Two sets of significance tests are presented. The first set contrasts each racial group (in Panels A, B, and C) against single-race white adults in Panel A: * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$. The second set ($p \leq .05$) contrasts each multiracial group (in Panels B and C) against the nonwhite single-race group (in Panel A) that makes up their multiracial identity (with the exception of “no best single-race,” who have no single-race component group to contrast against in Panel A). Only contrasts involving ^ablack and ^bAmerican Indian adults are significant

Where do multiracial adults fit into these patterns? Relative to single-race groups that report worse health than whites, some multiracial adults iterate toward the SRH of their least-advantaged single-race group, confirming the hypodescent pattern of Hypothesis 2. SRH among white-“other” and white-American Indian multiracial adults is substantially worse than among white single-race adults (18.5% and 25.7%, respectively) while being statistically similar to their nonwhite component racial groups. Similarly, the SRH of black-American Indians is closer to the group reporting the worst health, American Indians (with 27% reporting their health as fair to poor), while being statistically *higher* than the SRH of black adults. The percentage reporting fair to poor health among white-black respondents (13.4%), on the other hand, is closer to whites than blacks. For white-Asians, whose nonwhite

comparison group has relatively better health than whites, the rate of fair to poor health (7.8%) is also significantly lower than that of whites and strongly similar to that of single-race Asians. These patterns for white-black and white-Asian adults confirm predictions of upward iteration in Hypothesis 1. Lastly, and contrary to our hypotheses, we find no statistical differences between the health of multiracial NHPI adults (white-NHPI, Asian-NHPI) and whites, NHPIs, or Asians.

Next, we test Hypothesis 4 by asking whether patterns change when multiracial adults are asked to classify themselves with a single, best race. Baseline patterns indicate tentative confirmation of this hypothesis in that the health of select multiracial adults mirrors the group that they report best describes them. The percentage of multiracial persons who choose the label “Asian” and rate their health as fair to poor is similar to that among single-race Asians (8.3% versus 8.7%). That is also the case for best-race blacks, relative to single-race blacks (18.2% versus 19.9%). However, this pattern does not extend to all groups. A substantially higher percentage of multiracial respondents whose best race is white report their health as fair to poor compared with single-race whites (21.9% versus 13.5%). In addition, more best-race American Indians report fair to poor health than do single-race American Indians (30.2% versus 24%). Of those who do not report a best race, 20.3% report their health as fair to poor—a rate that differs little from best-race whites (but is significantly higher than single-race whites).

Multivariate Regression Models Among Single-Race and Multiracial Adults

Table 3 shows the odds of reporting fair to poor SRH for each racial subpopulation (relative to single-race whites). We assess disparities in SRH independent of demographic background (Model 1), socioeconomic factors (Model 2), and health behaviors and status (Model 3). Turning first to single-race groups, we find that background controls explain a large but incomplete part of the difference between white and nonwhite fair to poor SRH. For example, adjusting for SES explains 66% of the SRH disadvantage for blacks (i.e., it reduces the odds ratio from 1.76 to 1.26) and 63% of the difference between American Indians and whites. Adjusting for health behaviors and status reduces these differences a bit further, although they remain statistically different. The fully adjusted model shows that the odds of fair to poor SRH for blacks are 14% higher than for whites, and the odds for American Indians are 31% higher.

Only 33% of the difference between “other” race respondents and whites is explained by the controls (i.e., the odds ratio reduces from 1.60 to 1.40 between Models 1 and 3), perhaps because of combining several racial/ethnic groups with varying health profiles under one category. For Asians, we see that their superior SRH is reflective of their advantaged socioeconomic profile and their lower rate of risky health behaviors and chronic health conditions. After we adjust for these measures, Asians are actually 26% *more* likely than whites to report fair to poor SRH in Model 3. For NHPI adults, however, controls have little influence; in each model, NHPI adults remain at somewhat higher odds for reporting fair to poor SRH than are whites, but this difference is never significant.

We find several patterns for multirace groups. Results from Table 3 suggest that the health of those whose baseline SRH is worse than that of whites iterates to their least-advantaged minority counterpart, confirming Hypothesis 2. Like single-race

Table 3 Logistic regression models: Fair to poor self-rated health, with specific multiracial categories

	Model 1			Model 2			Model 3		
	β	(SE)	Odds Ratio	β	(SE)	Odds Ratio	β	(SE)	Odds Ratio
Racial Group (ref. = white)									
Black	0.56***	(0.01)	1.76	0.23***	(0.02)	1.26	0.13***	(0.02)	1.14
Asian	-0.19***	(0.05)	0.83	0.08	(0.05)	1.08	0.23***	(0.05)	1.26
Native Hawaiian/ Pacific Islander	0.21	(0.11)	1.23	0.21	(0.14)	1.24	0.21	(0.14)	1.23
American Indian	0.85***	(0.03)	2.34	0.40***	(0.04)	1.49	0.27***	(0.04)	1.31
Other	0.47***	(0.05)	1.60	0.34***	(0.06)	1.41	0.33***	(0.06)	1.40
White-black	0.35**	(0.12)	1.41	0.15	(0.14)	1.16	0.10	(0.15)	1.11
White-Asian	-0.12	(0.19)	0.89	0.13	(0.21)	1.14	0.20	(0.22)	1.22
White-NHPI	0.42**	(0.15)	1.52	0.34*	(0.16)	1.40	0.27	(0.18)	1.31
White-American Indian	0.84***	(0.04)	2.32	0.46***	(0.04)	1.59	0.35***	(0.05)	1.42
White-other	0.39***	(0.11)	1.47	0.27*	(0.13)	1.31	0.27*	(0.13)	1.31
Black-American Indian	0.81***	(0.13)	2.24	0.53**	(0.17)	1.71	0.38*	(0.17)	1.46
Asian-NHPI	0.22	(0.18)	1.25	0.35	(0.21)	1.41	0.28	(0.23)	1.32
Demographic Measures									
Age	0.04***	(0.00)	1.04	0.03***	(0.00)	1.03	0.02***	(0.00)	1.02
Age, squared	-0.17***	(0.02)	0.85	-0.13	(0.02)	0.88	-0.10***	(0.02)	0.91
Female	0.02*	(0.01)	1.02	-0.09***	(0.01)	0.92	-0.07***	(0.01)	0.93
Marital status (ref. = married)									
Unmarried couple	0.36***	(0.03)	1.44	0.11***	(0.03)	1.12	0.11**	(0.04)	1.11
Divorced or separated	0.67***	(0.01)	1.95	0.18***	(0.02)	1.20	0.12***	(0.02)	1.13
Widowed	0.38***	(0.02)	1.47	-0.07***	(0.02)	0.93	-0.05**	(0.02)	0.95
Never married	0.36***	(0.02)	1.44	-0.09***	(0.02)	0.92	-0.01	(0.02)	0.99
Other adults in household (ref. = none)									
One	0.07***	(0.01)	1.07	0.02	(0.01)	1.02	0.01	(0.01)	1.01
Two or more	0.24***	(0.01)	1.27	0.14***	(0.02)	1.15	0.08***	(0.02)	1.08
Any children in household	-0.10***	(0.01)	0.90	-0.09***	(0.01)	0.92	-0.08***	(0.01)	0.92
Lives in Hawaii	-0.08*	(0.04)	0.92	-0.07	(0.04)	0.94	-0.05	(0.04)	0.96
Socioeconomic Measures									
Completed education (ref. = < high school)									
High school graduate				-0.50***	(0.01)	0.61	-0.40***	(0.01)	0.67
Some college				-0.66***	(0.02)	0.52	-0.51**	(0.02)	0.60
College graduate				-1.04***	(0.02)	0.36	-0.76***	(0.02)	0.47
Annual household income (ref. =<\$25,000)									
\$25,000-\$49,999				-0.46***	(0.01)	0.63	-0.40***	(0.01)	0.67
\$50,000-\$74,999				-0.77***	(0.02)	0.46	-0.66***	(0.02)	0.52
\$75,000 and above				-1.12***	(0.02)	0.33	-0.93***	(0.02)	0.40
Missing				-0.40	(0.01)	0.67	-0.28***	(0.01)	0.75

Table 3 (continued)

	Model 1			Model 2			Model 3		
	β	(SE)	Odds Ratio	β	(SE)	Odds Ratio	β	(SE)	Odds Ratio
Employment status (ref. = employed)									
Unemployed				0.76***	(0.02)	2.13	0.68***	(0.02)	1.97
Homemaker				0.32***	(0.02)	1.38	0.37***	(0.02)	1.44
Student				-0.02	(0.04)	0.98	0.16***	(0.04)	1.17
Retired				0.45***	(0.01)	1.56	0.46***	(0.01)	1.59
Unable to work				2.49***	(0.02)	12.11	2.19***	(0.02)	8.96
No medical insurance				0.29***	(0.02)	1.34	0.25***	(0.02)	1.28
Has a personal doctor				0.31***	(0.02)	1.37	0.22***	(0.02)	1.25
Health Behaviors									
Smoking status (ref. = never smoked)									
Former smoker							0.23***	(0.01)	1.26
Smokes some days							0.41***	(0.02)	1.50
Smokes every day							0.54***	(0.01)	1.72
Heavy drinker							0.01	(0.02)	1.01
Body mass index (ref. = normal)									
Overweight							0.04***	(0.01)	1.04
Obese							0.46***	(0.01)	1.58
Any exercise							-0.72***	(0.01)	0.49
Health Problems									
Diabetes							1.10***	(0.01)	3.00
Asthma							0.81***	(0.01)	2.24
Likelihood Ratio	77,572,909			200,933,173			252,313,121		
<i>df</i>	23			37			46		
BIC	-77,572,578			-200,932,640			-252,312,458		

Sample size = 1,798,701. NHPI = Native Hawaiian/Pacific Islander

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

American Indians, the odds of reporting poor health for white–American Indians and black–American Indians are twice that of whites, independent of demographic characteristics. More than one-half of the disparity for white–American Indians (odds ratio changes from 2.32 to 1.59) and more than 40% of the disparity for black–American Indians (odds ratio changes from 2.24 to 1.71) is due to socioeconomic influences. Adjustments for health status and risky health behaviors narrow the disparity only slightly in the fully adjusted model. Disparities in SRH between whites and white–“others” follow a similar path as that of single-race “others”: they narrow some with adjustments for SES but remain significant in the fully adjusted model.

The remaining multirace groups, by contrast, demonstrate a pattern consistent with Hypothesis 1 and iterate toward the health of whites. For example, the lower propensity of white-Asians to report fair to poor SRH—which mirrors single-race Asians—is reduced to nonsignificance after we adjust for differences in their demographic profile (see Model 1). Additional controls moderate the odds ratio to some degree, but the differences are small and never attain statistical significance, unlike single-race Asians, who report significantly worse health. Alternatively, for white-NHPI adults and white-black adults (who do not differ from single-race whites in Table 2), controlling for demographic measures in Model 1 results in significantly elevated odds of reporting fair to poor SRH. The difference for white-blacks is reduced to nonsignificance by adjusting for socioeconomic variables, departing considerably from single-race blacks, whose differential maintains significance in the final model. Differences between whites and white-NHPI adults are similarly reduced to nonsignificance in Model 3. Finally, differences between whites and Asian-NHPI follow a similar path as single-race NHPI: they never attain significance, although odds ratios are positive in every model.

We should also note that the control measures demonstrated the expected relationships with SRH: SRH is better among persons who are more educated, are wealthier, are employed, are married, have children living in the home, and exercise regularly. On the other hand, SRH is worse among persons who are older, are uninsured, smoke, are overweight or obese, or are diabetic or asthmatic. The only somewhat unexpected finding is for the measure of whether respondents have a personal doctor, which is associated with poorer SRH. This likely reflects health selection, whereby sicker adults see a physician more frequently and are thus more likely than healthier adults to report that they have a personal doctor.

Best Single-Race Outcomes

Patterns of Classification

In Table 4, we limit the sample to multiracial adults and cross-tabulate respondents' multirace identities (shown in rows) with their best race (shown in columns). Reading across the top row, for example, we see that 29.5% of white-blacks select white as their best race, 54.1% indicate black, and 16% do not report a best race.

These patterns provide a simulation, so to speak, of the labels that multiracials would choose if offered a forced-choice question on race that has no option for declaring a multiracial identity (see also Brown et al. 2007; Herman 2004). Overall, the distributions of best race reveal the presence of norms that guide the choices of multirace groups (see also Campbell and Eggerling-Boeck 2006; Harris and Simm 2002; Herman 2004; Hitlin et al. 2006). More than one-half of white-blacks and more than 70% of black–American Indians state black as their best race, demonstrating an adherence to the “one-drop” rule, the convention that those who have any trace of African ancestry identify as black (Davis 1991). American Indian identity appears to be less salient: only 14.7% of white–American Indians prefer the label “American Indian;” 78% of this group selects “white.”

Table 4 Multiracial identity \times best single-race identity cross-tabulation ($n=27,302$)

Multiracial Identity	"Best Race" Identity							Total
	White	Black	Asian	NHPI	American Indian	Other	No Best Race	
White-black								
%	29.5	54.1	0.0	0.0	0.0	0.4	16.0	100
<i>N</i>	669	1,227	0	0	0	9	363	2,268
White-Asian								
%	45.4	0.0	37.8	0.0	0.0	0.6	16.2	100
<i>N</i>	1,029	0	856	0	0	13	368	2,266
White-NHPI								
%	52.0	0.0	0.0	41.3	0.1	0.1	6.6	100
<i>N</i>	1,076	0	0	853	1	2	136	2,068
White-American Indian								
%	78.0	0.0	0.0	0.0	14.7	0.2	5.2	100
<i>N</i>	12,849	0	0	0	2,361	29	832	16,071
White-other								
%	73.5	0.0	0.0	0.0	0.0	20.1	6.4	100
<i>N</i>	1,216	0	0	0	0	333	106	1,655
Black-American Indian								
%	0.0	73.4	0.1	0.1	15.0	0.1	11.4	100
<i>N</i>	0	1,118	1	1	228	2	173	1,523
Asian-NHPI								
%	0.0	0.0	37.5	55.3	0.0	0.1	7.1	100
<i>N</i>	0	0	544	803	0	1	103	1,451

Data not weighted. NHPI = Native Hawaiian/Pacific Islander

Multiracial Asian and NHPI adults are more evenly distributed along single-race labels (see Harris and Simm 2002; Xie and Goyette 1997). Just less than one-half of white-Asians selected white (45.4%), with the remainder divided between Asian (37.8%) and declaring no best race (16.2%). We find a similar pattern for white-NHPI and Asian-NHPI groups. Meanwhile, white-"others" demonstrate a strong preference toward the white racial label (73.5%), with most of the remaining group reporting that "other" best describes them.

Self-Rated Health Disparities Using the Best-Race Identity

In Table 5, results are mixed with regard to whether the SRH disparities of best-race multiracial respondents are equivalent to those of single-race adults. In fact, we find relatively little support for Hypothesis 4. We see that the health of best-race whites strongly diverges from that of single-race whites. According to Model 1, this group is nearly twice as likely as single-race whites to report fair to poor SRH. This gap narrows but remains significant in the fully adjusted model (Model 3), suggesting a substantial health disparity between multiracial respondents who indicated that white

Table 5 Odds ratios from logistic regression models predicting fair to poor self-rated health, using the best single-race measure

	Model 1			Model 2			Model 3			Model 4		
	β	(SE)	Odds Ratio	β	(SE)	Odds Ratio	β	(SE)	Odds Ratio	β	(SE)	Odds Ratio
Single-Race Adults												
White (ref.)	—	—	—	—	—	—	—	—	—	—	—	—
Black	0.57***	(0.01)	1.76	0.23***	(0.02)	1.26	0.13***	(0.02)	1.14	0.12***	(0.02)	1.13
Asian	-0.18***	(0.05)	0.83	0.08	(0.05)	1.08	0.23***	(0.05)	1.26	0.23***	(0.05)	1.25
NHPI	0.20	(0.11)	1.23	0.21	(0.14)	1.24	0.21	(0.05)	1.23	0.19	(0.13)	1.20
American Indian	0.85***	(0.03)	2.34	0.40***	(0.04)	1.49	0.27***	(0.04)	1.31	0.29***	(0.04)	1.33
Other	0.47***	(0.05)	1.60	0.34***	(0.06)	1.41	0.33***	(0.05)	1.40	0.32***	(0.06)	1.38
Multirace Adults												
Best: White	0.67***	(0.04)	1.96	0.40***	(0.04)	1.49	0.32***	(0.05)	1.38			
Best: Black	0.49***	(0.11)	1.63	0.22	(0.13)	1.25	0.11	(0.14)	1.11			
Best: Asian	-0.07	(0.24)	0.93	0.24	(0.25)	1.27	0.25	(0.27)	1.28			
Best: NHPI	0.23	(0.19)	1.26	0.22	(0.20)	1.25	0.09	(0.22)	1.10			
Best: American Indian	1.11***	(0.10)	3.03	0.62***	(0.12)	1.85	0.47***	(0.12)	1.60			
Best: Other race	0.45	(0.24)	1.56	0.12	(0.35)	1.13	0.16	(0.33)	1.17			
Best: None	0.75***	(0.12)	2.12	0.54***	(0.16)	1.71	0.46**	(0.16)	1.59			
Likelihood Ratio	77,497,058			200,929,624			252,323,055			252,164,275		
<i>df</i>	23			37			46			39		
BIC	-77,496,726			-200,929,091			-252,322,392			-252,163,713		

Sample size = 1,798,701. NHPI = Native Hawaiian/Pacific Islander. Model 1: Adjusted for demographic characteristics and socioeconomic status. Model 2: Adjusted for demographic characteristics, socioeconomic status, health behavior, and health problem measures. Model 3: Adjusted for demographic characteristics and socioeconomic status. Model 4: Adjusted for demographic characteristics, socioeconomic status, health behavior, and health problem measures. Model 4: Adjusted for measures included in Model 3, but allocates multirace adults back into single-race categories

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

was the race that best described their identity and respondents who classified themselves as solely white. This likely reflects, in part, the disproportionate presence of white–American Indians who, despite having a more disadvantaged health experience than whites, often report white as their best race (see Table 4).

For other groups, however, the contrast with single-race white adults is more equivalent when comparing single-race and multiracial adults, though none attain significance. The fully adjusted odds ratios of fair to poor SRH for single-race blacks and best-race blacks are nearly identical, although the differential for best-race blacks is not significant (odds ratio=1.14 and 1.11, respectively). Both disparities are driven most prominently by socioeconomic factors. The same is true for single-race Asians and best-race Asians (odds ratio=1.26 and 1.28, respectively), although disparities between whites and best-race Asians are never significant. We should note that for both groups, the sample size is substantially smaller, and additional significance tests revealed that odds ratios between single and best-race adults do not significantly differ for either black or Asian adults. Single-race and best-race NHPI adults also are similar in that neither group, regardless of model, differs significantly from single-race whites in its odds of reporting fair to poor SRH. We also find no significant disparity between whites and best-race “other” adults, even as single-race “others” continue to be more likely to report poor health, net of controls.

The exception to these patterns is multiracial American Indian adults. Mirroring the findings from Table 2, baseline white–American Indian disparities in SRH are greater for those who report American Indian as their best race compared with single-race American Indian adults. This confirms Hypothesis 3’s expectation of multiracial distinction in the negative direction. Additional significance testing (not shown) indicated that these odds ratios are significantly different between the two American Indian–identified groups.⁷ Also, like single-race American Indians, the disparity for best-race American Indians is driven primarily by socioeconomic factors, which also explains the difference between best race and single-race groups. We also find that existing outside the norms of single-race identification (i.e., no best race) coincides with poorer health. Those who do not indicate a best race experience substantial disparities in SRH in the baseline model because they are twice as likely as are whites to report fair to poor SRH. Although this gap narrows in the fully adjusted model, it remains significant.

In the final model (Model 4), we provide an additional test of Hypothesis 4 by estimating racial disparities in the odds of fair to poor SRH with best-race multiracial categories combined with their single-race counterparts (adjusting for the full set of covariates applied in Model 3). We find few differences in the patterns of racial health disparities when multiracial individuals are allocated to their best race, reflecting their small overall proportion in the sample. The changes in odds ratios indicate that disparities widen or narrow only slightly depending on the relative SRH of the multiracial group. We also evaluate how collapsing multiracial persons into single-race categories influences model fit using the Bayesian information criterion

⁷ Indeed, in Table 5, we ran a series of additional significance tests (not shown) that, for each racial group, contrasted the effects of best-race identity against their single-race counterpart (e.g., multiracial best-race blacks against single-race blacks), in addition to the displayed contrasts against single-race whites. The only additional contrast that was significant is for American Indians in Model 1.

(BIC). With the standard that smaller (or more negative) BIC values indicate a better model fit, we see that Model 3 provides strong evidence of superior fit when compared with Model 4 (see Raftery 1995; Teachman 2003). This implies that modeling race-based disparities of SRH with separate categories for multiracial respondents is statistically preferable to merely placing those individuals into single-race categories, even if those categories are self-selected.

Conclusions and Discussion

The current study explores the implications of incorporating those who select multiple races into an analysis of racial health disparities. Broadly, the findings confirm prior work on multiracial adolescents, showing that no one model can fit the well-being of all multiracial populations (e.g., Campbell and Eggerling-Boeck 2006). After we adjust for a range of health characteristics, white-blacks and white-Asians demonstrate an advantaged pattern (supporting Hypothesis 1), showing no significant disparities from whites, while gaps in health between blacks and whites and between Asians and whites persist. Meanwhile, white-“others” and both partial-American Indian groups report similar disparities to those of either “other” race or American Indians, conforming to Hypothesis 2 (the hypodescent model). Finally, white-NHPIs experience greater disparities from whites than do the single-race NHPI population, pointing to a pattern of negative multiracial distinction (and supporting Hypothesis 3). Although these gaps cease to be significant in the fully adjusted models, their appearance suggests that a significant segment of the multiracial population is neither neatly assimilating into a white majority nor blending into a disadvantaged minority.

Can multiracial adults simply be folded into their best-race categories? Ultimately, grouping best-race blacks, Asians, and NHPIs into their respective groups does not obscure patterns to any meaningful degree, confirming Hypothesis 4. However, our results suggest that this approach overshadows the uniquely poor health of groups who report a best race whose members are, on average, healthier (i.e., best-race whites and best-race American Indians). Allocating multiracials who cite white as their best race to that category, for example, may result in an apparent worsening of the overall health profile of whites, providing the misimpression that some of the gaps between white health and nonwhite health are actually closing.

There are several implications of these findings. First, ignoring multiracial health disparity patterns omits a crucial source of variation in race-specific adult health. Net of controls, white-blacks, white-Asians, and white-“others” display no statistically significant disparities from single-race whites, suggesting that they are not exposed to the same rigors of racially stratified life as are their monoracial counterparts. Adjusting for SES differences explains a larger piece of the health differences between single-race groups than between multiracial groups and whites. It may be that this inequality is less taxing on multiracial health, although supplementary analyses (not shown) suggest that some multiracials (e.g., white-blacks) experience fewer SES gaps from whites; however, patterns are complex, and a detailed exploration of them is beyond the scope of this article.

Second, we find that complex forms of identification provide potent ways to tease out and properly assess differences that would otherwise be overlooked. In

particular, the case of partial-American Indians highlights the need for complex measures of race/ethnicity. Their distinctively poor health profile would be overshadowed if allocated to one best race. They tend to identify with single-race groups who are, on average, healthier. This may demonstrate the modern iteration of the “marginal man” hypothesis. According to its original formulation, “. . . a man [sic] sharing in the cultural traditions of two distinct peoples, never quite willing to break with . . . his traditions, and not quite accepted, because of racial prejudice, in the new society in which he now sought to find a place” (Park 1928:892). Understanding experiences of racial prejudice and cultural participation for multiracial American Indians may elucidate their poor health status relative to their single-race counterparts (white, black, or some other group). The geographic isolation of American Indians (Eschbach 1995) points to severe distinctions between native peoples and the social mainstream, and attempts to reconcile these worlds of “two distinct peoples” may incur specific health costs (Liebler 2004).

The contributions of this research notwithstanding, a few caveats are important to note. First, our data set is limited in its coverage of the multiracial population. The structure of the BRFSS race question prohibits the incorporation of Hispanics in this analysis, which is a significant limitation given the growing focus on U.S. Hispanic health and the frequency of interracial/interethnic contact involving Hispanics. Additionally, as we discuss earlier, cross-sectional data are a limited resource, given the variability in how multiracial individuals report their race over time. Therefore, we captured only those who always deemed themselves multiracial or have since identified in this fashion. The impact on health reports is unclear, although research has found greater racial disparities in mental health outcomes for multiracials when they are identified via parental race as opposed to self-reports (Campbell and Eggerling-Boeck 2006) and somewhat worse socioeconomic profiles for those who switch their racial identity over time when compared with those with consistent racial identification (Hitlin et al. 2006). Although consistently self-identified multiracial persons *may* be healthier than those who change identity over time, this pattern needs to be more firmly established in future work.

Another limitation of our research is that we are unable to account for the ways that individual identity overlaps with how persons are perceived by others. The notion of “racial resemblance” is problematic, given the gaps between how individuals understand their own race and what outsiders actually see (Campbell and Troyer 2007; Khanna 2004; Penner and Saperstein 2008; Saperstein 2006, 2008). Just as being misperceived by others may help explain unique health disadvantages for some (Campbell and Troyer 2007), being perceived as a member of an advantaged group may help explain a decreased vulnerability to the race-related stress of prejudice (Krieger 2000; Williams and Neighbors 2001).

Given the importance of SRH in forecasting patterns of disease and mortality (Idler and Benyamini 1997), our findings indicate a need to explore a more diverse set of health outcomes for this group—such as chronic conditions, where racial disparities are most prominent (e.g., hypertension, diabetes)—and a direct assessment of the influence of racism and discrimination. These findings highlight the need for new approaches in understanding how race operates in a landscape where racial categories are no longer mutually exclusive yet racial inequality still exists.

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