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Racial/Ethnic Disparities in Men's Health: Examining Psychosocial Mechanisms

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Abstract

This study uses data from the Health and Retirement Study and an approach informed by the Biopsychosocial Model of Racism as a Stressor to examine the extent to which SES, stressors, discrimination and neighborhood conditions are mechanisms underlying racial/ethnic disparities in functional limitations among men. Results reveal that racial/ethnic differences in SES, stressors, discrimination and neighborhood conditions—individually and collectively—account for a substantial proportion of racial/ethnic disparities in functional limitations. Findings suggest that the social determinants of health for men of color need to be more seriously considered in investigations of and efforts to address health disparities.

Keywords

Race; Health Disparities; Stress; Discrimination; Neighborhood Conditions

Despite the social and economic advantages typically associated with being male,[1] men have higher death rates than women for 14 of the top 15 leading causes of death.[2] In the men's health literature, men of color have largely been invisible,[3] yet men of color account for much of the reported sex difference in mortality globally.[4,5] U.S.-born black and Hispanic men have higher rates of fatal chronic conditions and shorter average life expectancies than their white and female counterparts.[6] Black and Hispanic men face a number of racialized and gendered social norms, cultural expectations, and stressors that may negatively shape their health behaviors and health, and explain their elevated rates of morbidity and mortality.[2,6–8] Compounding phenomena related to race/ethnicity is the stress associated with trying to fulfill hegemonic and normative gender roles (e.g., the traditional role of economic provider for their families) in spite of their limited economic opportunities and exposure to racism.[5,7]

Black and Hispanic men are among the most disadvantaged racial/ethnic-gender groups in the U.S. across several domains (e.g., unemployment, incarceration, discrimination, and homicide); these social determinants of health contribute to disproportionately high rates of unhealthy behaviors, functional limitations and premature mortality among men of color.[2,5,6,9,10] The disparities in health created by the unique experiences of men of color

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lead not only to lost years and diminished quality of life, but also substantial economic, social and familial costs due to excess health care spending, reductions in labor market productivity, and limited contributions to their social and family networks.[11] Importantly, the toll of health disparities is likely to increase over the next couple decades given several population trends including the aging baby boom cohort and the increasing racial diversity among the older population.

In order to develop efficacious strategies for eliminating health disparities, both researchers and policy makers need a better understanding of the social determinants of racial/ethnic disparities in men's health. This study aims to extend previous research by examining whether racial/ethnic differences in socioeconomic status (SES) and exposure to a wide array of stressors, discrimination and neighborhood conditions account for racial/ethnic disparities in functional limitations among older men. We draw on the Biopsychosocial Model of Racism as a Stressor [12] to better understand the mechanisms underlying racial/ethnic health disparities among men, focusing on two research questions. First, are there racial/ethnic differences in men's access to socioeconomic resources and exposure to stressors, discrimination and poor neighborhood conditions? Second, to what extent do racial/ethnic differences in SES, stress, discrimination, and neighborhood conditions—individually and collectively—account for racial/ethnic disparities in health among men? To answer these questions, we investigate group differences in functional limitations among a nationally representative sample of middle to late aged U.S.-born non-Hispanic white, non-Hispanic black and Hispanic men. We focus on functional limitations because they are manifestations of underlying disease processes[13] and they are important quality of life factors and indicators of total morbidity burden in the middle-aged and older population, detectable regardless of clinical diagnosis,[14] and amenable to interventions.[15, 16]

Background

Previous research has documented racial/ethnic disparities in an array of health outcomes—including functional limitations. [17] For example, compared to older U.S.-born white men, older black and Hispanic men have elevated rates of functional limitations.[18,19] Theoretical and empirical research suggests that institutional and interpersonal racism may underlie racial/ethnic disparities in health because they reduce access to salubrious social and economic resources, and increase exposure to deleterious factors.[20,21] A prominent theoretical framework, the Biopsychosocial Model of Racism as a Stressor, posits that, due to institutional and interpersonal racism, racial/ethnic minorities are exposed to disproportionately high levels of stress, which negatively impact their health and lead to health disparities between racial/ethnic groups.[12,22] In particular, elevated levels of stress can cause harmful effects on various body systems, such as the neuroendocrine, cardiovascular, gastrointestinal and immune systems.[23–25] Extant literature generally suggests that blacks and Hispanics experience eventful (e.g., stressful live events and traumatic events) and chronic stressors more frequently than whites, though the evidence is mixed.[26–29]

Racial/ethnic minorities are also more likely to experience stressors related to living in poor, racially segregated communities, which are a result of institutional racism and

discrimination in housing and lending markets. [30] Race-based residential segregation—a pernicious form of institutional racism—affects health by restricting socioeconomic attainment through impediments to quality education, restricted employment opportunities, and increasing exposure to unhealthy living conditions (e.g., toxins, violent crime, lack of social institutions). [31,32] Blacks and Hispanics are therefore additionally exposed to more stressors at the neighborhood level, such as extreme poverty, violent crime, and neighborhood disorder (e.g., graffiti, trash, pollution).[32] Growing evidence suggests that neighborhood stressors and perceived discrimination have deleterious effects on physical health. [21,28,33] Racial discrimination, a dimension of interpersonal racism, also contributes to racial/ethnic disparities in health by increasing stress and reducing access to desirable resources.[21,34] For example, blacks and Hispanics report more perceived discrimination—a psychosocial stressor—that has the potential to induce negative emotional states (e.g., psychological distress), unhealthy behaviors (e.g., smoking, alcohol abuse, and overeating), and changes in the physiologic system.[31,33] Moreover, discriminatory practices such as being unfairly fired or denied a promotion are likely to restrict socioeconomic mobility, life chances, and well-being, particularly as older adults approach retirement age.[35] Indeed, relative to white men, black and Hispanic men are less likely to have stable opportunities to achieve success in educational or employment pursuits or to have dependable chances to increase their income and accumulate wealth and retire. [19,36] These socioeconomic disadvantages are associated with poorer health through increased exposure to risks and limited access to health-promoting behaviors and resources.[37] Consequently, racism has emerged as an important social determinant of black and Hispanic men's health and men's health disparities.[7,9,38–40]

Although there has been a great deal of theorizing about the role of racial/ethnic differences in exposure to stressors underlying health disparities, there is relatively little empirical research on this topic—especially among older men. A handful of studies have suggested that the unequal distribution of stressors partially accounts for racial/ethnic inequality in physical health.[10,28] Overall, however, results from previous studies have yielded only modest evidence of racial/ethnic differences in stress exposure and its role in mediating health disparities. This may be due to several limitations of prior studies. For example, with the exception of a few recent studies, [28] previous research has generally lacked comprehensive measurement of stressors. Specifically, studies have largely ignored the combined significance of chronic, discrimination, and neighborhood stressors and have tended to use summary additive measures of stressors, which obscure racial/ethnic differences in specific types of stressors and their unique contributions to health disparities. In addition, prior studies on racial/ethnic differences in stress exposure and its consequences for health disparities have tended to exclude Hispanics and have lacked nationally-representative data. Understanding the mechanisms underlying Hispanic-white disparities in health is especially important as Hispanics are the fastest growing minority group in the U.S. Lastly, previous studies on the topic have not focused specifically on racial/ethnic inequality among older men, many of whom have experienced considerable cumulative adversity over the life course. [41,42]

Due to their simultaneously dominant position in the gender hierarchy as men yet subordinate position as racial/ethnic minorities, black and Hispanic men face a number of

unique stressors and barriers to achieving good health.[5–7] Their disadvantages are posited to stem from the stress associated with trying to achieve normative gender expectations in spite of their limited economic opportunities and increased exposure to racism.[6,7] Black and Hispanic men may also experience significant and excess challenges in fulfilling the role of an economic provider for their families in middle age and face difficulty moving into older age, retiring and fulfilling the roles of an elder or grandparent.[6,7,43] Moreover, some have argued that minority males are the primary, though not sole, targets of discrimination at the hands of majority males.[44] Stress resulting from these circumstances across the life course likely contributes to poor health and premature mortality among minority men.[6]

This study aims to extend previous research on health stratification by examining whether racial/ethnic differences in SES, and exposure to eventful, chronic, discrimination, and neighborhood stressors account for racial/ethnic disparities in health among older men. We utilize an approach informed by the Biopsychosocial Model of Racism as a Stressor to 1) examine racial/ethnic differences in men's access to socioeconomic resources and exposure to eventful, chronic, discrimination and neighborhood stressors, and 2) investigate the extent to which racial/ethnic differences in SES and stressors—individually and collectively—account for racial/ethnic disparities in men's health. To address these aims, we investigate group differences in functional limitations among a nationally representative sample of middle aged and older U.S.-born non-Hispanic white, non-Hispanic black and Hispanic men.

Data and Methods

Sample

This study uses data from the Health and Retirement Study (HRS), a nationally representative study of English or Spanish-speaking adults in the contiguous United States over the age of 50 (spouses of respondents were interviewed regardless of age-eligibility). Respondents were interviewed biennially between 1992 and 2010. We use data from the 2006 and 2008 HRS core data sets in tandem with the HRS Psychosocial Modules from those years (half of the sample was randomly assigned to complete the Psychosocial Module in 2006, while the other half of the sample was assigned to complete the module in 2008). Together, the core data set and Psychosocial Module have extensive measures of SES, stressors, discrimination, and neighborhood context. Blacks and Hispanics were oversampled, and the institutionalized were excluded with the exception of a small number of respondents who were institutionalized during the course of the study. Analyses are based on 2,478 non-Hispanic white, 311 non-Hispanic black, and 126 Hispanic male respondents born in the U.S. Other racial/ethnic groups are excluded due to small sample sizes.

Dependent Variable

Functional Limitations were measured by respondents' self-assessments as to whether they had some difficulty performing a set of tasks including walking several blocks, walking one block, walking across the room, sitting for two hours, getting up from a chair after having sat for a while, climbing several flights of stairs, climbing a single flight of stairs, stooping, kneeling, or crouching, lifting or carrying 10 lbs, picking up a dime off of a table, raising

one's arms above one's shoulders, and pushing or pulling large objects such as furniture. Consistent with prior research on functional health,[17] we used a summary measure of the total number of limitations ranging from 0–12 (Cronbach's alpha = .84).

Independent Variables

Race/Ethnicity—Dummy variables indexed self-identified *race/ethnicity:* 1) non-Hispanic white, 2) non-Hispanic black, and 3) Hispanic. Respondents were classified as White or Black if they indicated that they considered themselves, respectively, as primarily "White or Caucasian" or "Black or African American" and did not report any Hispanic/Latino ethnicity. Individuals were classified as Hispanic if they reported that they considered themselves to be "Hispanic or Latino." Despite oversampling Hispanics, the HRS has a very small number of respondents of Cuban, Puerto Rican or other origins, rendering the reliable detection of differences within the Hispanic population by ethnicity unfeasible.[17] A majority of the Hispanic men in this study are of Mexican descent.

SES—SES measures included respondent's *educational attainment* (in years), *household income* (includes total income for both spouses in the case of marriage), and *household net worth* (total assets – total liabilities). Both household income and wealth were logged because of their skewed distributions.

Eventful and Chronic Stressors—Several indicators of stress were measured. *Traumatic life events* (e.g., gun violence, death of a child, spouse/child addictions, victim of abuse, experienced major fire or natural disaster) and *stress life events* (e.g., long-term unemployment, job loss, home burglarized) were measured as counts of the events respondents reported experiencing . Ten traumatic events (range = 0–10) and five stressful events (range = 0–5) in total were considered. *Financial strain* was assessed with the average of two items that addressed the respondents' family's financial situation and difficulty paying bills on time. Lastly, *chronic stress* was measured as a count of eight current and ongoing problems that have lasted twelve months or longer, such as ongoing problems in a close relationship, difficulties at work, or housing problems (range = 0–8).

Discrimination Stressors—Two discrimination measures developed by Williams and colleagues (1997) were used in the analyses. *Perceived everyday discrimination* was comprised of five items that are considered to be "character assaults" [45 (pp212)] and tend to occur on a daily basis. Examples included being treated with less courtesy or respect, receiving poorer service at restaurants, not being thought of as smart, being thought of as dangerous, and being threatened or harassed.[35] Values of perceived everyday discrimination reflect the sum of Likert scores across the five items, 1 ("almost always") to 6 ("never"). Scales were reversed before summing (alpha = .79). The values of *major discrimination* reflect the sum of major events that respondents reported experiencing. Such events included being unfairly fired or denied a promotion, unfairly treated by the police, or unfairly denied a bank loan. Six events, in total, were considered (range = 0–6) and were deemed "major" events because they tend to interfere with one's socioeconomic mobility, life chances, and well-being.[35]

Neighborhood Conditions—Two dimensions of neighborhood context were considered. *Neighborhood disorder* was measured by averaging scores across four items (ranging from 1–7) assessing the amount vandalism, safety, danger, and vacant or deserted housing perceived by the respondent (alpha = .74). Similarly, *neighborhood cohesion* was measured by averaging scores across four items assessing the amount of connectedness, trust, friendliness, and support the respondent feels towards residents of the neighborhood (alpha = .84).

Sociodemographic Control Variables—*Age* was measured in years. In order to account for cohort effects, analyses controlled for *birth cohorts*. Members of the HRS birth cohort, who serve as the reference group, were born between 1931 and 1941. Other cohorts were born from 1942–1947 (War Baby cohort), and 1948–1953 (Early Baby Boomer cohort). We also controlled for year of interview (2006=0; 1=2008) to adjust for the possibility of period or wave effects. In addition, *marital status* (married=1; 0=otherwise) was included as a control.

Analytic Strategy

To address the first research questions, T-test and Chi-square statistics were used to determine whether there were racial/ethnic differences in the study variables. These analyses provided information on the extent to which men are differentially exposed to stressors, discrimination, and neighborhood conditions. To assess the second research question, we estimated multivariate, ordinary least squares (OLS) regression models of the social determinants of functional limitations. All models control for age, birth cohort, marital status and year of interview. Model 1, the base model, provides estimates of racial/ethnic differences in health, net of the control variables. Models 2, 3, 4, and 5, adjust for SES, eventful and chronic stressors, discrimination stressors, and neighborhood stressors, respectively. Model 6, the full model, adjusts for all of these factors simultaneously. By comparing the magnitude and statistical signification of the race/ethnicity coefficient across models 1 through 6, we can observe the extent to which various factors, individually and collectively, mediate disparities.

Results

Table 1 presents descriptive statistics for the dependent and independent variables by race/ethnicity. Results suggest that, compared to white men, black and Hispanic men have more functional limitations. Black and Hispanic men are also disadvantaged in terms educational attainment, income, wealth, financial strain, chronic stressors, and neighborhood conditions compared to white men. Moreover, black men report experiencing more everyday and major discrimination than white men.

Table 2 presents estimates of racial/ethnic disparities in functional limitations. These models show estimates of racial/ethnic disparities in health before and after adjusting for an array of socioeconomic and psychosocial factors. Findings from Model 1 imply that functional limitations vary by race/ethnicity, as the coefficients for black and Hispanic are both positive and statistically significant. Estimates from Model 1 reveal that black and Hispanic men have more functional limitations than white men. However, the extent of mediation of

disparities in functional limitations differs for blacks and Hispanics when each is compared to white men. The statistically significant black coefficient in Model 1 in tandem with the non-significant black coefficients in Model 2 suggest that SES fully mediates black-white disparities in functional limitations. Results also show that accounting for the role of stressors attenuates the black-white gap in self-functional limitations by 14%, as evidenced by the decline in the black coefficient from .722 in Model 1 to .618 in Model 3. Similarly, changes in the magnitude of the black coefficient between the baseline model and Models 4 and 5 suggest that black-white disparities in functional limitations are partially mediated by discrimination (36%) and neighborhood conditions (25%).

Disparities in functional limitations between Hispanics and whites are fully mediated by adjusting for SES, as evidenced by the non-significant Hispanic coefficient in Model 2. Interestingly, stressors appear to play a smaller role in mediating Hispanic-white versus black-white gaps in functional limitations. Results from Models 3, 4 and 5 indicate that Hispanic-white disparities in functional limitations are partially mediated by stress (22%), discrimination (3%) and neighborhood factors (9%). Non-significant coefficients for black and Hispanic in Model 6 suggest that racial/ethnic disparities in functional limitations are mediated entirely after adjusting for the full array of socioeconomic and psychosocial measures.

Importantly, findings from Table 2 show that there are statistically significant associations between functional limitations and numerous socioeconomic and psychosocial factors, most of which are in the expected direction. Specifically, higher levels of education, income, and neighborhood cohesion, and lower levels of traumatic events, financial strain, chronic stress, everyday discrimination and major discrimination are associated with having fewer functional limitations.

Discussion

A large body of research provides evidence of racial/ethnic disparities in health, but extant studies have rarely investigated the social determinants of these health disparities among men. Moreover, previous research on the underlying causes of racial/ethnic disparities has tended to focus almost exclusively on role of socioeconomic inequality, often ignoring the potential mediating role of unequal exposure to stressors at individual, neighborhood, and societal levels. This study aims to fill these gaps in the literature and extend previous research in several respects. First, this study examines racial/ethnic disparities in health among older men, focusing on the implications of the unique experiences of older black and Hispanic men, an understudied population. Second, by utilizing the Biopsychosocial Model of Racism as a Stressor, examining differential socioeconomic resources and exposure to eventful, chronic, discrimination and neighborhood stressors, and assessing their contributions to health disparities, this study identifies critical impediments to equal access to good health. Third, this study examines the structural and psychosocial factors that contribute to the relatively poor functional health of middle-aged and older black and Hispanic men, many of whom have experienced considerable cumulative adversity over the life course.

As predicted by the Biopsychosocial Model of Racism as a Stressor, findings show that older men of color are disadvantaged compared to older white men in terms of access to socioeconomic resources, exposure to chronic, discriminations and neighborhood stressors. Importantly, results reveal that racial/ethnic differences in SES and exposure to chronic, discrimination and neighborhood stressors—individually and collectively—contribute to racial/ethnic disparities in functional limitations among men. Collectively, these factors completely account for black-white and Hispanic-white disparities in functional limitations. Supplemental analyses (available upon request) indicated that the strongest and most consistent mediators of health disparities were—in descending order—socioeconomic resources, everyday discrimination, chronic stress and neighborhood cohesion. However, it is noteworthy that discrimination and neighborhood cohesion mediated more of the black-white disparity in functional limitations than they did the Hispanic-white difference. Conversely, financial strain and chronic stressors mediated more of the Hispanic-white gap in functional limitations than they did black-white disparities. These findings suggest that future research on health disparities should include an examination of black and Hispanic men's unique disadvantages and stressors, and their health consequences.

The patterning of these results may be due to several factors. For example, hegemonic notions of masculinity and economic success have historically been intertwined and thus, it is critical to recognize the centrality of wealth, financial stability and economic success to gendered stressors in men's lives.[7,46] While men today are far less likely to be the sole economic provider for a family than in previous generations, men's gender and class role performance is so tied to their identities and the expectations of others that it remains an especially salient source of stress. [43,47] As men move into older age, the challenges they may have faced in fulfilling their role of a provider, parent or spouse may be a source of stress as they look at the impact of what they were or were not able to provide for their families.[43] Given the challenges that black and Hispanic men face in achieving economic success, those who define their current or past worth and themselves by their position in the economic hierarchy may therefore face considerable stress that negatively affects their health.[6,41] Men of color, for example, earn lower levels of income than white men at every level of education,[48] and middle-class black and Hispanics have markedly lower levels of wealth than middle-class Whites.[6] While socioeconomic status is inversely related to stress for white men, as black and Hispanic men's socioeconomic status increases they tend to endure *more* stress.[6,49] Because the men in our sample were middle-aged and older, they may experience the stress of their current SES, as well as the consequences of a lifetime of social, political and economic inequality which are likely to shape how men negotiate being economic providers, seeking to retire and deciding what they will do in their later years.[43,50] Thus, greater socioeconomic resources may not confer the same health benefits for men of color as they do for white men.[2,51,52]

In addition to exploring the significance of SES, this study also found that discrimination was an important social determinant of men's health disparities. Consistent with the Biopsychosocial Model of Racism, older black men experienced more everyday and major discrimination than older white men, which may map onto socioeconomic and psychological pathways linking racism and health.[12,51,52] The discrimination that black men face is not

simply due to their race/ethnicity; the type and intensity of the men's racial experiences are greatly affected by the fact that they are both African American and men.[55] Being male triggers a variety of social expectations, relations and practices that are shaped by gendered environmental and experiential factors.[56] Men of color may experience unique forms of discrimination because race, ethnicity, gender, and other factors (e.g., age, SES, sexual orientation) combine to shape a range of negative race- and gender-based stereotypes.[55]

While the individual and structural aspects of SES, stress, and discrimination are critical determinants of men's health disparities, neighborhood conditions – shaped by US patterns of race-based residential segregation – also serve as a critical determinant of men's health disparities.[57–61] Segregation confounds the relationships between race/ ethnicity and health and SES and health in the US because minority and white men tend to live in qualitatively different communities.[58,62] Consequently, black men, Hispanic men, and white men tend to live—and have lived over their lifetimes—in communities that have different health risk exposures, health resources and patterns of health outcomes. [38,39,63–65] Racial/ethnic differences in these exposures and resources are likely to lead to the exacerbation of health disparities both at a single point in time and longitudinally.

It is important to note that there are several limitations of this study. First, due to data limitations, we are unable to identify the specific mechanisms linking function limitations to socioeconomic factors, stressors, discrimination and neighborhood. Research shows that stress impacts numerous body systems such the neuroendocrine, cardiovascular, gastrointestinal and immune systems. [24,25] Consistent with the sociomedical model of disablement—which posits that risk factors impact downstream health outcomes, such as functional limitations, primarily via upstream pathologies such as serious illnesses[13]—racial/ethnic inequality in socioeconomic resources and exposure to stressors may indirectly lead to disparities in functional limitations through racial disparities in various body systems and disease processes.[17] Future research should investigate the specific mechanisms through which psychosocial factors impact functional limitations and other health outcomes.

Second, whereas the discrimination measures used in this study were based on questions asking about "unfair treatment," and divided the line of questioning into two parts (e.g., frequency and attribution), previous research suggests that asking respondents explicitly about experiences with racial discrimination in one question results in reports of higher levels of racial discrimination and greater racial differences in reported rates of discrimination.[66] It is unclear whether using a one-step question that asks explicitly about racial discrimination would explain a greater proportion of racial/ethnic disparities in health. Third, while neighborhood conditions were assessed, this study does not include any direct measures of segregation—a known determinant of health and health disparities. [60] Fourth, we were unable to evaluate the influence of aspects of the health care system on the relationships examined in this study. Previous research has shown that various aspects of the medical encounter (e.g., physician-patient communication, health care quality, and patient satisfaction) vary by race/ethnicity[67] and impact health. [68–70] Fifth, the cross-sectional nature of the data does not allow us to examine cumulative stress exposure or establish causal link between psychosocial factors and health. A life course perspective would suggest that both health and stress exposure are dynamic, and have reciprocal, long-term effects.

Therefore it is possible that the mediating role of stressors is underestimated in this study given our inability to account for stressors in early life and at key points and transitions across the life course. Lastly, given that the respondents in the study are middle aged or older, it is important to consider how mortality selection prior to midlife may affect the results. Higher rates of premature mortality among black and Hispanic men compared to white men may result in a selective survival bias. Thus, findings regarding racial/ethnic disparities may be conservative and should be interpreted as conditional upon survival to midlife. To address these limitations, future research on identifying the mechanism underlying racial/ethnic disparities in health should include measures explicitly about discrimination, segregation, and aspects of health care, as well as utilize longitudinal data extending across the life span.

Despite these limitations, we find strong evidence there are racial/ethnic differences in SES and exposure to a multitude of stressors, and that these inequalities contribute to racial/ethnic disparities in health among older men. These findings are significant because they highlight the fact that health is shaped by multiple socioeconomic and psychosocial factors. Furthermore, by focusing on racial/ethnic disparities among men, our findings render visible the experiences of men of color who face many unique disadvantages. The health disparities highlighted in this study, therefore, reflect an excess and unequal distribution of human suffering that requires more than the typical single-issue policy responses. Policies that address the multiple pathways to health inequality, while considering the differential impact of those policies on racial/ethnic and gender inequality more broadly, are needed. Efficacious policies should promote equal access to healthy environments and opportunities for pursuing good health.

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Table 1

Means of Study Variables by Race/Ethnicity (N=2,915)[ab]

	White	Black	Hispanic
Functional Limitations	1.92	2.58*	2.46*
Adult Socioeconomic Status			
Years of Education	13.49	11.68*	11.31*
Household Income	10.94	10.23*	10.31*
Wealth	14.91	14.78*	14.81*
Stressors			
Traumatic Life Events	1.67	1.64	1.87
Stressful Life Events	.26	.27	.39*
Financial Strain	2.49	2.69*	2.63*
Chronic Stress	2.03	2.17*	2.31*
Discrimination			
Everyday Discrimination	8.56	9.40*	9.05
Major Discrimination	.57	1.03*	.68
Neighborhood Conditions			
Neighborhood Disorder	3.49	3.65*	3.84*
Neighborhood Cohesion	5.59	5.03*	5.42
Controls			
Age	64.92	64.71	63.87*
Marital Status	.85	.70*	.83
Interviewed in 2008	.48	.51	.50
HRS	.61	.60	.54
War Baby	.19	.18	.17
Early Baby Boomer	.20	.22	.28
N	2478	311	126

[a] Means for dummy variables can be interpreted as the proportion of the sample coded 1 on that indicator

[b] Welch-Satterthwaite t-tests computed for difference in means with unequal variances

* $p < .05$ for comparison of racial/ethnic/gender group to white men

Table 2

Estimates of Racial/Ethnic Disparities in Functional Limitations, and the Roles of SES, Stressors, Discrimination and Neighborhoods; OLS Regression Models

	1	2	3	4	5	6
Race (ref. white)						
Black	.722**	.160	.618**	.460*	.539*	−.048
Hispanic	1.233***	.610t	.967**	1.187***	1.122***	.512t
Socioeconomic Status						
Education		−.167***				−.146***
Income		−.387***				−.303***
Net Worth		−.252				−.144
Stressors						
Traumatic Life Events			.294***			.179***
Stressful Life Events			−.070			−.197*
Financial Strain			.411***			.223*
Chronic Stress			.221***			.164***
Discrimination						
Everyday Discrimination				.138***		.090***
Major Discrimination				.183*		.124t
Neighborhood Conditions						
Neighborhood Disorder					.166**	.042
Neighborhood Cohesion					−.303***	−.117*
Constant	2.194t	12.580***	−.628	−.404	3.188*	7.008*
R^2	.025	.107	.097	.081	.051	.183

Notes: All models control for age, marital status, year of interview, and cohort

t p<.10

* $p < 0.05$

** $p < 0.01$

$^{***}p < 0.001$