

Chapter 8.

Perceptions of Discrimination, Health and Mental Health: The Social Stress Process

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The consistency and strength of the associations between African American ethnicity and poor health in the research literature suggest that it is time to systematically evaluate the role of racism and discrimination in physical and psychological health (Gary, 1995; Landrine & Klonoff, 1996; Thompson, 1996; Utsey & Ponterotto, 1996). We attempt to identify with greater precision the types, amounts, and aspects of racism and discrimination that affect health and to find how these experiences combine with other risk factors to affect health status. In addition, we propose that perceptions of unfairness or injustice may mediate adverse health reactions in whites as well as nonwhites. Specifically, we explore the extent to which perceptions of racial discrimination, including reports of such things as reverse discrimination, have negative effects on health, independent of race or ethnicity.

Introduction

Blacks and other nonwhites have long experienced inequalities across a broad range of social indicators (Jaynes & Williams, 1989; Williams, 1996), and health status is one area of persistent and pervasive disparities. From earliest historical records, African Americans have suffered higher rates of disease, disability, and early death than have whites (Williams, Lavizzo-Mourey, & Warren, 1994). Yet, the specific factors responsible for racial disparities in health are still relatively unknown (Polednak, 1989; Williams, 1996). If we are to advance our understanding of race and ethnicity as social risks for health (Cooper & David, 1986; Gould, 1977; Jackson, 1992), we must identify how daily experiences within social, economic, political, and cultural environments promote illness (Herman, 1996; Jackson, Neighbors, & Gurin, 1986; Williams & Chung, 1996; Williams et al, 1994).

Studies of race and health frequently invoke racism and discrimination as major explanations for the high levels of morbidity and mortality in the African American population (Jackson et al., 1996). Racism can affect the health status of African Americans in several ways:

- Racism gives rise to discrimination (differential treatment), which leads to differences in the quality and quantity of medical care (Blendon, Aiken, Freeman, & Corey, 1989; Council on Ethical and Judicial Affairs, 1990).
- Racism and discrimination cause differences in life chances and living conditions that create a variety of inequitable socioeconomic conditions in areas such as education, employment, and housing. Low socioeconomic status (SES) is one of the most important predictors of adverse changes in health status (Anderson & Armstead, 1995; Williams, 1990; Williams & Collins, 1995). The specific mechanisms by which low SES gives rise to stressors and other risk factors that compromise health, and the processes in which they are embedded, have yet to be adequately elucidated (Anderson & Armstead, 1995).

- The experience of specific incidents of unfair treatment on the basis of race may generate psychic distress and other changes in physiological processes that adversely affect health (Landrine & Klonoff, 1996; McNeilly et al., 1996; Myers, 1982).
- Some of the coping strategies that people use as they grapple with inequitable living conditions and a hostile psychosocial environment, such as internalizing negative stereotypes or using drugs and alcohol, may also impair physical and psychological functioning.

Early literature on African American mental health reflects a clear consensus that racial discrimination and racism adversely affect the psychological health of African Americans (McCarthy & Yancey, 1971). Yet, there have been few attempts to empirically explore the consequences of racism and racial discrimination on the psychological well-being of African American children, adolescents, and adults (Jackson et al., 1996; Landrine & Klonoff, 1996; Thompson, 1996; Utsey & Ponterotto, 1996). Subsequent research has uniformly noted that discrimination is an important factor in understanding African American health status, and some researchers suggest that it may account for particular patterns of association (Landrine & Klonoff, 1996). Fernando (1984) even proposed that racial discrimination is more than an added stress; it is a pathogen that affects health. However, these constructs and their proposed relationships have received little attention (Franklin, 1989; Gary, 1995; Harvey, 1985; Landrine & Klonoff, 1996; Thompson, 1996; Utsey & Ponterotto, 1996).

Two relatively recent studies of Mexican American women provide some direct evidence that perceived racial bias is associated with higher levels of psychological distress. The first, a study of 140 immigrant Mexican women in southern California (Salgado de Snyder, 1987), used experience with ethnically motivated discrimination as one of 12 measures of social stress. High levels of discrimination were reported; 52 percent of the sample indicated that they had experienced discrimination in the previous 3 months. Of the 12 stress measures, discrimination was the strongest predictor of high scores on the Center for Epidemiological Studies-Depression Scale (CES-D).

The second study-- of 303 female Hispanic professionals-- documented even greater discrimination on the job (Amaro, Russo, & Johnson, 1987). Eighty-two percent of the women surveyed reported experiencing employment discrimination. This experience was associated with higher levels of stress in balancing family and professional roles, lower levels of personal life satisfaction, and higher levels of psychological distress.

The link between racial discrimination and health outcomes other than mental health is supported by the following four studies:

- In a classic study of stress and hypertension in Detroit, Harburg and colleagues (1973) found that suppressing anger or feeling guilty about displaying anger in response to unfair treatment in two hypothetical situations was associated with higher blood pressure. This relationship was true for both black and white males, but people in poorer neighborhoods were more likely to respond passively to unfair treatment than were those in more affluent areas.
- A study in rural North Carolina (James, La Croix, Kleinbaum, & Strogatz, 1984) found that the perception that being black hindered one's chances for success was positively related to higher blood pressure among African American males who were actively seeking to improve their socioeconomic status.
- Krieger's (1990) study of 101 black and white women explored the relationship between rates of hypertension and the experience of racial and gender discrimination. Krieger found that black women who experienced and quietly accepted unfair treatment were four times as likely to have high blood pressure as those who talked to others or took action in response to the treatment. Black women were six times more likely than white women to respond passively to unfair treatment, suggesting that they perceived themselves as having little control in these encounters. Gender discrimination was unrelated to hypertension for white women.
- Direct effects of racist provocation on cardiovascular functioning among African-Americans, have been reported by Harrell and colleagues (in Jones, Harrell, Morris-Prather, 1996; Morris-Prather, Thomas, & Umowale, 1996).

Data from the National Study of Black Americans (NSBA) also indicate that the experience of racial discrimination in the previous month or in employment settings is inversely related to multiple indicators of both mental and physical health (Williams & Chung, 1996). Persons who reported experiencing discrimination had higher levels of chronic health problems and disability, but also psychological distress and lower levels of happiness and life satisfaction. . In experimental studies, McNeilly and colleagues (1996) also found direct effects of racist provocation on cardiovascular as well as emotional responses among African Americans.

Discrimination, Socioeconomic Status, and Health

Racial discrimination is not randomly distributed; several social and economic factors predict variations in exposure to discrimination (Gary, 1995; Williams & Chung, 1996). It is the contexts within which discrimination occurs, and how an individual's location in the social structure affects exposure to and impact of this discrimination, that interests us. Low socioeconomic status is clearly one context that affects options and shapes quality of life.

Intertwined with low SES are stressful lifestyles such as poor nutrition, poor education, crime, traffic hazards, substandard and overcrowded housing, disadvantageous location of housing, low-paying jobs, unemployment and underemployment, and a lack of health insurance and access to basic health services. Adams and Dressler (1988) found, for instance, that persons under financial strain and those who perceived their neighborhoods as unsafe and deficient in basic services were more likely to be upset by racial discrimination. The authors concluded that racism and discrimination cannot be studied in isolation from their broader structural contexts. A study by Lipscomb and Tronchi (1981) further suggests that SES-linked environmental stressors play an important role in African American drinking patterns. Their survey of 18- to 59-year-old African Americans in two San Francisco neighborhoods found that criminal victimization and marital, drug, family, and police problems were predictive of higher levels of alcohol consumption. Together, these factors may contribute to a wide range of problems in African American communities, but again, empirical evidence supporting these relationships is sparse (Landrine & Klonoff, 1996; Thompson, 1996).

Current social measures of personal stress are considered biased toward the environmental stressors experienced by more advantaged SES groups and inadequate characterizations of the stressors faced by the poor in general and the African American poor in particular (Gary, 1995; Landrine & Klonoff, 1996). In addition to these biases, qualitative differences may exist among ethnic and racial groups in the experience of stress (Thompson, 1996; Utsey & Ponterotto, 1996). Wilson (1987) notes, for example, that African Americans have been increasingly concentrated in depressed inner-city neighborhoods, while the white urban poor are more evenly dispersed, with many residing in relatively safe and comfortable neighborhoods.

The research literature suggests that stressors present in inner-city areas may significantly affect health.

- Perceptions of crime in the neighborhood have been found to relate inversely to psychological well being (White, Kasl, Zahner, & Will, 1987).
- The classic ecological studies of Harburg and associates (1973) found residence in stressful urban areas to be characterized by such factors as low median income, little formal education, residential instability, marital instability, and crime. Urban residence also related inversely to health (Bell, Taylor-Crawford, Jenkins, & Chalmers, 1988; Berenson, Stiglich, Wilkinson, & Anderson, 1991; Garbarino, Dubrow, Kostelny, & Carole, 1992).

All together, a substantial proportion of the African American and poor nonwhite population lives in urban environments that likely expose them to a large number of stressors (Gary, 1995; Jackson et al., 1996) that undermine their health.

Psychosocial Resources, Discrimination, and Health

Despite inconclusive data on the consequences of discrimination for the psychological well-being of African Americans, it has been suggested that discrimination may diminish self-esteem, generate feelings of loss, precipitate learned helplessness, or elicit anticipatory avoidance behaviors (Essed, 1991; Fernando, 1984). The health effects of supportive social responses to discrimination are even less clear. Kirby and Jackson (1996) did find that racial composition of one's immediate work group had a salutary effect on the relationship between perceptions of job discrimination and lowered job satisfaction. McNeilly et al. (1996) reported that social support reduced emotional responses to racial provocation but had no influence on cardiovascular reactivity. Similar results have been reported by Jones et al (1996) and by Morris-Prather et al (1996). These findings suggest that racial discrimination may interact with personality characteristics and particular coping styles to affect health.

In addition, an African American's failure to report discrimination, given the ubiquitous presence of racism, may reflect an internalized denial of racial bias, which leads to adverse changes in health (Krieger, 1990). This interpretation is consistent with some limited evidence suggesting that individuals may be more adversely affected by stressful situations when they deny the stress or suppress emotional reactions (Winkleby, Ragland, & Syme, 1988). The literature on particular adaptation strategies that oppressed groups display as they seek to define their own reality in the face of racism (Akbar, 1991; Mohutsioa-Makhudu, 1989; Myers, 1982; Pettigrew, 1964; Taylor & Jackson, 1990; Williams & Chung, 1996) suggests that the positive or negative effects of adaptation strategies may vary.

- In a racist society, some portion of an oppressed group will seek acceptance by borrowing and internalizing the dominant society's ideology. Some African Americans will idealize the normative cultural depiction of the superiority of whiteness and accept the culture's devaluation of blackness. This response may be particularly laden with pathogenic consequences that can lead to what Akbar has called the alien self-disorder in which an oppressed group adopts the attitudes, beliefs, and behavior of the dominant group.
- Alternatively, African Americans often contrast their poverty with the material advantages of whites; their desire for these benefits leads to feelings of self-rejection and self-hate (e.g., Mohutsioa-Makkudu, 1989). A study of 2,890 inner-city African American women has provided some empirical support for the idea that internalization of racist beliefs can lead to poorer health (Taylor & Jackson, 1990). Internalized racism was measured by a 21-item scale that assessed the extent to which respondents believe in their innate inferiority, and by a 9-item scale that measured the extent to which they feel uncomfortable around other African Americans. This study found a positive relationship between internalized racism and alcohol consumption.
- Data from the NSBA also document that internalized racism (measured as the endorsement of negative stereotypes about African Americans) is predictive of lower levels of happiness and life satisfaction and higher levels of chronic health problems and psychological distress (Williams & Chung, 1996).

Research Questions

The “social stress process”, delineated by Pearlin and linked to social structure by Turner at the beginning of this volume, seems a useful framework for considering the role of multiple stressors in the lives of African Americans and other minorities. Thus, our analysis of racial-ethnic disparities in psychological health is organized around this framework. We postulate that exposure to stressors, such as racism and social inequity, in the larger society occurs in discrimination experiences and is reflected in a related deprivation of socioeconomic resources. We hypothesize that negative health outcomes are prompted by exposure to these individual stressors, that the effects of these stressors are mediated by incident-related stress and discrimination’s hazardous qualities-- particularly its chronicity and perceived stressfulness-- and that the effects are moderated by psychosocial buffering resources.

First, we examine the nature of perceived racial or ethnic discrimination and its distribution by important structural factors (race-ethnicity and socioeconomic indicators), as well as the distribution of potential psychosocial buffers.

Second, we define discrimination as a critical life event and stressor-- or source of personal stress deriving from the environment-- and examine its influence on physical and psychological health independent of contributing structural factors.

Finally, we examine the role of four psychosocial coping resources in reducing the impact of perceived discrimination: emotional support and self-efficacy from the stress process literature; as well as the importance of religious beliefs and a disposition to act in response to discrimination (added because of their potential relevance in nonwhite coping).

On the basis of the research literature, we hypothesized the following:

1. Reports of bad treatment because of race or ethnicity occur among whites, but are more likely among nonwhites.

2. Disadvantaged SES generally predicts such perceived discrimination, but disadvantage in terms of devalued status characteristics-- age, female gender, and relatively little education-- predicts its denial (Feagin, 1991; Gary, 1995; Jackson et al., 1996; Sigelman & Welch, 1991).

3. Independent of race-ethnicity and other structural characteristics, reports of discriminatory treatment predict physical and psychological problems.

4. Psychosocial resources may moderate the effects of perceived discrimination on health in the general population.

5. The frequency and stressfulness of discrimination are potentially hazardous attributes of a critical life event that will mediate the events health effects.

6. Psychosocial resources may moderate the health effects of the frequency and stressfulness of the discrimination.

Methods

Sample

Telephone survey data from 2,398 nonwhite and white non-proxy respondents aged 25 to 96 from the 1994 third wave of the Americans' Changing Lives Study (ACL) (Herzog et al., 1989; House, Lepkowski, Kinney, Mero, Kessler, & Herzog, 1994) were analyzed.¹ ACL was a multi-staged, stratified probability sample of individuals 25 years of age and older. Respondents were surveyed in their homes by interviewers from the Survey Research Center at the University of Michigan Institute for Social Research. African Americans and all persons over age 60 were sampled at twice the rate of whites under 60 to increase the size of these groups and facilitate age and race comparisons. Table 1 contains the sampling information and outcomes for the three waves of the survey (1986, 1989, and 1994). Questions relevant to the analyses in this chapter were asked primarily in the third wave. Response rates by race, the number of proxy respondents, average age, and percentage female are shown in Table 1.2 This original sampling approach resulted in complex design effects (Herzog, Kahn, Moran, Jackson, & Antonucci, 1989) so all analyses in this chapter used weighted data.

¹ The centered weight used in creating the dataset included both proxy and nonproxy respondents, resulting in a total of 2,568 cases. Our analyses were conducted solely on the nonproxy respondents. Because of the original weighting, the centered nonproxy respondents total 2,467. The results of the analyses are unaffected by the use of this centered weight versus other possible centering that could have been done on the 2,398 nonproxy respondents.

² All tables are available from senior author.

Measures

Tables 2 and 3 present inter-correlations in the ACL data relevant to the following constructs.

Perceived Discrimination, Its Frequency, Recency, and Stressfulness

A single question was used to assess perceived discrimination: “Now thinking over your whole life, have you ever been treated unfairly or badly because of your race or ethnicity?” (N13) The question was dichotomously coded to indicate the *presence or absence of discrimination*. For those who indicated ever being treated badly in their lifetime, additional questions were asked: *the frequency of being treated badly because of race or ethnicity* (N13a) was coded as a three-level measure; the question regarding most recent occurrence of maltreatment (N13b) was coded as the year; the *perceived stressfulness of the maltreatment* (N13d) was coded as a four-level ordinal measure.

Psychosocial Coping Resources

The analyses employed two psychosocial resource measures drawn from the social stress literature-- *self-efficacy and emotional support*. In addition, two concepts were added for their relevance to African American coping-- *strength of religious beliefs and action responses to discrimination* (which were measured only among those who reported discrimination). Although self-efficacy and an action disposition were believed to be conceptually parallel, they turned out to be empirically independent, but each related positively to the availability of emotional support among respondents who had experienced discrimination (Table 2). Emotional support and strength of religious beliefs were also believed to be conceptually parallel; they were linked only in the total sample (Table 3). Thus, self-efficacy and measures selected for their cultural relevance are independent, but the emotional support measure bridges the two originating item domains.

Self-efficacy was assessed with six items in an agree/disagree format and combined in an equally weighted scale (I can do just about anything I set my mind to do; Sometimes I feel that I am being pushed around, etc.). The self-efficacy measure includes items from both Rosenberg's (1965) self-esteem index and Pearlin's (1989) mastery index. *Emotional support* was assessed with a two-item additive index that measure whether the respondents felt loved, cared for, and listened to by relatives and friends. *Action taken* consisted of responses to a three-part question about behavioral reactions to a discriminatory event. It was coded as a three-level passive to active variable: (1) accepting it and not speaking of it; (2) accepting it but talking to other people or trying to do something but keeping it to oneself; and (3) trying to do something and talking to other people. *Religious beliefs* were assessed by a one-item measure of the importance of religious beliefs.

Structural Variables

Race-ethnicity was obtained from the first wave of ACL. About three-quarters of Hispanic respondents in this wave and 18% of Asian respondents indicated they were racially white; the remainder indicated Hispanic and Asian, respectively, as their race. Other ethnic groups that report substantial discrimination could also be identified.³ Thus, the race-ethnicity measure in Tables 2 and 3 was coded as a three-category variable: *nonwhites* (self-identified nonwhites and self-identified American Indians, Asians, and Hispanics), *whites vulnerable to discrimination* (Polish, Italian, Near Eastern, and Asians or Hispanics indicating race as white), and *other whites* (all others indicating race as white).

³ Italian and Polish white ethnic groups are found at the bottom on important socioeconomic indicators, and Asians and Hispanics are normally characterized as protected minority groups.

The *interrelated socioeconomic variables used in the analyses* (Table 3) range along a gradient from *patent indicators of established economic status* (owns home, currently married, family income) to *patent indicators of unconstricted economic status* (currently working; not currently separated, divorced, widowed) and *economically valued status* (male, relative youth, highly educated). Home ownership was a dummy variable. Marital status was dummied into currently married, never married, and previously married categories. Family income was imputed for missing cases and used as a continuous variable. Since income ranged from \$300 to \$624,000 in the past year, a log transformation of the original income variable was used in all analyses. Work status was a simple dummy variable of working versus not working at present. Sex was an interviewer observation variable from the first-wave interview and used as a dummy variable in the analyses. Age ranged from 31 to 95 in this third wave and was used as a continuous variable. Education was used as a continuous variable with a count of 0 to 17 and more years of education.

Physical and Psychological Health

As shown in Table 3, six interrelated indicators of health problems were measured. They range along a gradient from *physical measures*-- number of chronic, physical problems and global judgment of poor health-- to the American Psychiatric Association Diagnostic and Statistical Manual, Third Revision's (DSM-III) *major depressive disorder*, and are linked by *measures of stress and adjustment problems*-- negative life events, low life satisfaction, and depressive symptoms.

1. *Chronic physical problems* involved a simple count of responses to a question about having experienced one or more serious health problems (arthritis, lung disease, stroke, diabetes, etc.) within the past 12 months.
2. *Self-rated poor health* was assessed on a 5-point (excellent to poor) scale by a single item that asked, "Overall, how would you rate your health at the present time?"

3. *Negative life events* reflect a simple count of the number of critical events with negative impact that had occurred between the wave 2 and wave 3 interviews (a 5-year period).
4. *Life satisfaction* was assessed on a 5-point scale by asking, “Overall how satisfied are you with your life as a whole at the present time?”
5. *Depressive symptoms* were assessed through the 11-item CES-D scale. DSM-III depression was developed from a reworded version of the stem questions from the depression section of the Diagnostic Interview Survey (DIS) (Robins, 1986).
6. The procedure developed by Kessler and Magee (1994, pp. 248-249) to code the ACL Wave 2 DIS scale was used to ascertain the presence or absence of *major depressive disorder*.⁴

⁴ Respondents who reported “dysphoric affect or anhedonia, feeling sad, blue, or depressed, or loss of interest or pleasure nearly everyday for at least 2 weeks” were asked whether they also experienced a list of other physical and psychological symptoms. Those who reported affective disturbance and four out of nine symptoms for 2 weeks or more were considered to have suffered an episode of major depression.

Analyses

Racial-Ethnic Distribution of “Stress Process” Measures

First, we completed bi-variate analyses of the social distribution of reports of being treated badly because of race or ethnicity and the distribution of psychosocial resources. We then used logistic regression coefficients to identify independent structural predictors of each. Race-ethnicity was added to the models in an extra-explained variance procedure to determine whether a total effect independent of SES and larger than that expected by chance was present.⁵ We also used logistic and ordinary least squares regression analyses within the discriminated-against sub-population to identify structural predictors of both the risk qualities of perceived discrimination-- its frequency, recency, and stressfulness-- and the psychosocial resources. (Tables 4-6)

Racial-Ethnic Health Inequalities

We used least squares and logistic regressions with the entire sample in an extra-explained variance procedure to examine the effects of racial-ethnic identity on the six physical and psychological outcomes, first introducing socioeconomic indicators, then race-ethnicity. Multiple determination and regression coefficient estimates were compared across the two models. (Table 7)

⁵ This analysis was stratified by race-ethnicity to permit examination of interaction effects. Reliable estimates of regression coefficients in the stratified models and their standard deviations were identified, but racial-ethnic differences in unstandardized coefficients were statistically unreliable and have not been presented.

Perceived Discrimination Model of Health Problems

Next, we used ordinary least squares and logistic regressions in an extra explained variance procedure to examine the effects of perceived discrimination on the six physical and psychological outcomes, controlling first for other social and economic indicators and then for race-ethnicity as well (i.e. for structural characteristics). We compared coefficients of multiple determination and reliable regression coefficient estimates across the two models.⁶ (Table 8)

Stress Process Models of Health Problems

Ordinary least squares nested regression models were used to estimate the effects of both perceived discrimination and psychosocial resources on health outcomes, controlling for race-ethnicity and other structural characteristics. We estimated the main effects of both psychosocial resources and perceived discrimination in predicting health outcomes and their interaction effects. Then, for those reporting discrimination, we estimated the main and interaction effects of both coping resource measures and the frequency and stressfulness of the discrimination for the six health outcomes. (Tables 9-12)

⁶ The first model was stratified by race-ethnicity to permit examination of interaction effects. Racial-ethnic group differences in regression coefficients were statistically unreliable and are presented.

Findings

Racial-Ethnic Distribution of Stress Process Constructs

Perceived Discrimination

Overall, 43% of the nonwhite portion of the sample (self-identified blacks, American Indians, Asians, or Hispanics) reported discriminatory treatment in the course of their lifetime. The percentages ranged from 23% of Hispanics to 47% of African Americans. Roughly 12% of respondents who described themselves as ethnically Polish, Italian, Near Eastern, Hispanic, or Asian but racially white reported suffering discrimination. Among the remainder of whites, approximately 7% reported encountering discrimination. Overall, these results are as expected. Nonwhites are much more likely to report being discriminated against, but whites also report being treated badly because of race or ethnicity.

We examined the possibility that differential disadvantage in other structural characteristics might explain the relationship between racial-ethnic status and perceived discrimination. First, we examined socioeconomic characteristics of nonwhites, vulnerable whites, and other whites. Nonwhites were significantly less likely to own their own homes (64% as opposed to 78% for vulnerable whites and 80.1% for other whites); they reported less yearly family income (\$37,476, \$44,013, and \$47,165); and they were much less likely to be currently married (58%, 73%, and 72%). The racial-ethnic groups did not differ significantly in the proportion of females (56% for nonwhites, 57% for vulnerable whites, and 53% for other whites), mean age (50, 50, and 53, respectively), years of education (12.1, 11.7, 13.0), or proportion not currently employed (33%, 30%, 35%). *Overall, nonwhites as a group appeared to be less well established than vulnerable whites or other whites, though otherwise similar in status characteristics.*

We performed logistic regressions of lifetime, perceived racial-ethnic discrimination on other structural and then other structural and racial-ethnic predictors. Nonwhite and vulnerable white identities not only remain reliable predictors when other status characteristics are controlled, they also account for most of the variance in perceived discrimination (Table 4). As hypothesized, some forms of status constriction also independently predict perceived discrimination (previously but not currently married; not currently working). Consistent with the literature, however, devalued statuses are salient to discrimination denial (age, female gender, relatively little education), that is, occupants of valued statuses are more likely to report discrimination experiences.⁷ Unestablished statuses-- low family income, does not own home, not currently married-- do not predict discrimination when race-ethnicity is controlled, which suggests that race-ethnicity mediates the relationship between unestablished socioeconomic status and perceived discrimination. Thus, *race-ethnicity, independent of other structural characteristics, is key in the prediction of discrimination reports, although indicators of status constriction and status value also make small, independent contributions.*

⁷ Reliable regression coefficients for prediction models stratified by race-ethnicity further suggest that a relatively high income is salient to perceived discrimination specifically among nonwhites—as would be expected from the literature on denial of discrimination among lower-income African Americans—and that other status characteristics are salient to the prediction of discrimination within white groups; however, examination of the coefficient standard errors indicates that there are no statistically reliable differences between racial-ethnic groups.

Frequency, Recency, and Stressfulness of Discrimination

Regressions in Table 5 address qualities of the reported discrimination that might pose increased health risks. A nonwhite identity adjusted for social and economic status is salient not only to the perception of discrimination but also to its frequency and recency; a vulnerable white identity is not. A few independent forms of status disadvantage (low family income, female, and poorly educated), adjusted for race-ethnicity, also predict one or another form of discrimination risk. On the other hand, one form of status advantage, relative youth, independently predicts potentially hazardous characteristics of discrimination. *Race-ethnicity and social status are salient, not only to perceived discrimination and its denial but also to qualities of the discrimination that might mediate its effects on health.*

Psychosocial Moderators

Contrary to suggestions of bias in the literature, a nonwhite identity does not predict scores on potentially moderating psychosocial coping measures (self-efficacy and emotional support) drawn from the stress process literature. Among respondents who report experiencing discrimination, this holds with or without adjustments for SES (Table 6). However, a nonwhite identity does predict the strength of religious beliefs among those who report discrimination, with or without adjustments for SES. Nonwhite ethnicity also predicts action responses among those who report discrimination, but only if adjusted for other status characteristics. Thus, *the expectation that a nonwhite identity is salient to the strength of religious beliefs and action responses among those who say they have coped with discrimination can be supported.*⁸

⁸ Note that in the total population a nonwhite identity also fails to predict scores on psychosocial coping measures drawn from the stress process literature, but does reliably predict scores on strength of religious beliefs (Table 3).

Neither does a vulnerable white identity predict scores on potentially buffering psychosocial resource measures drawn from the stress process literature among respondents who report experiencing discrimination, with or without adjustments for socioeconomic status. Nor does a vulnerable white identity predict strength of religious beliefs among those who report discrimination, with or without other status controls. However, with status controls, a vulnerable white identity does predict a reported disposition to act in response to a discrimination experience.

In the zero-order realm for the total population, most of the other indicators of social status predict high scores on self-efficacy and emotional support and low scores on the strength of religious beliefs in the total population. This also holds among those who perceive discrimination in their lives, except for a reduction in the number of salient indicators. Given perceived discrimination and adjusted for race-ethnicity, however, social status characteristics are no longer salient to religious beliefs (regression coefficients in Table 6). Various indicators of status advantage do independently predict emotional support and self-efficacy as well as the related construct, action when faced with discrimination. The exception is gender advantage, with males more likely than females to be inactive in response to discrimination and to score low on emotional support. *Race-ethnicity and social status independently affect not only the reporting of discrimination and its frequency or recency but also the availability of psychosocial resources to those who must cope with its effects.*

A Structural Model of Inequalities in Health

Small but reliable zero-order correlations in the total sample (Table 3) further suggest that scores on psychological disorder indicators can be reliably predicted from race-ethnicity: a nonwhite identity is positively linked to these health problems as expected; a white identity is negatively linked; but a white, discrimination-vulnerable identity is unexpectedly linked to relatively high life satisfaction. However, estimated regression coefficients in Table 7 indicate that *all* but one of the predictive links between nonwhite identity and health reports are mediated by socioeconomic characteristics; controlling for SES also increases the already significant prediction of CES-D depressive symptoms from a nonwhite identity. In addition, the socioeconomic controls account for the link between a white, discrimination-vulnerable identity and life satisfaction, but also increase to significance its links with excellent health and the absence of major depressive disorder.

Thus, the expectation, that nonwhite ethnicity directly predicts negative health reports, is not supported-- except for depressive symptoms--when social and economic controls are introduced. The expectation that a vulnerable white identity might also predict health problems is not supported, even with adjustments for socioeconomic status. In fact, a discrimination-vulnerable white identity appears to predict some positive health states that are, in fact, either attributable to socioeconomic status or conditional on it.

A Stress Process Model of Health Inequalities

Discrimination and Health Inequalities

Zero-order correlations for the total sample (Table 3) further suggest that perceived discrimination makes small but reliable predictions of scores on all of the psychological problems measured-- negative life events, low life satisfaction, depressive symptoms, major depressive disorder-- as well as on a global judgment of poor health. However, introduction of perceived discrimination into a regression model that already contains structural characteristics appreciably alters neither the total amount of variance explained in any of the six measured health outcomes (adjusted R-square) nor the independent contributions of the various status characteristics (estimated regression coefficients for models in Table 8). In other words, *reports of perceived discrimination independently explain little if any of the total variation in health reports, although they do reliably predict individual variation in health reports; they do not account for predictive links between race-ethnicity or social status and health.*

Psychosocial Resources and Health Inequalities

The expectation that psychosocial resources can independently reduce negative health reports is partially supported. Tables 3 and 9 indicate that reliable predictive links between health and resource measures drawn from the stress process literature are generally unaffected by controls for structural characteristics or perceived discrimination. High self-efficacy reliably lowers scores for all the health problems considered; high emotional support reliably lowers scores on adjustment problems (low life satisfaction, depressive symptoms) and poor health. Although Table 2 also indicates that a resource measure added for its potential relevance to nonwhite coping-- strength of religious beliefs-- predicts physical problems (number of chronic physical problems, poor health), those links are mediated by controls for structural characteristics. A reliable regression coefficient suggests an independent negative link with life dissatisfaction, but this adds little to the total explanation of variance. *Most remarkable are the extent of self-efficacy's contribution to the reduction of scores on low life satisfaction, depressive symptoms, and depressive disorder as well as its failure to mediate the remaining reliable link between nonwhite ethnicity and depressive symptoms.*

Discrimination-Buffering Psychosocial Effects on Health

The expectation that psychosocial resources drawn from the stress process literature can buffer the effects of perceived discrimination on health in the general population is partially supported. Independent of main effects as well as structural controls, coefficients of partial determination in Table 9 reflect no meaningful increase in extra-explained variance with introduction of buffering models; on the other hand, reliable regression coefficients for interaction terms indicate that *given discrimination, high self-efficacy appears to negatively predict individual variation in stress and adjustment problems (negative life events, low life satisfaction, and the number of depressive symptoms).*

A Stress Process Model of Health Inequalities, Given Perceived Discrimination

Discrimination Frequency or Stressfulness and Health Inequalities

Zero-order correlations for those who report at least one discriminatory experience in the course of their lives (Table 2) suggest that descriptions of its potentially hazardous qualities-- its frequency, recency, or the stressfulness of the most recent event-- can predict health problems.

- Both frequency and recency appear to be linked to stress and adjustment problems (low life satisfaction, negative life events, number of depressive symptoms) as well as to the number of chronic physical problems reported.
- Stressfulness of the most recent event appears linked to the number of negative life events reported for the prior 5 years as well as to the number of depressive symptoms and depressive disorder.

Although introducing frequency and stressfulness into a prediction model that already contains structural characteristics slightly increases the amount of variance explained in adjustment- and chronic physical- problem measures (adjusted R-squares in Table 10, Cols. 1-2, 5-10), only frequency yields statistically reliable regression coefficients. In this discrimination-hazard prediction model, the link between a nonwhite identity and depressive symptoms that could not be accounted for by status characteristics or perceived discrimination can be accounted for by the frequency of discrimination experiences (regression coefficients and extra-explained variances in Table 10). In other words, *among those who report a discrimination experience, the frequency of discrimination predicts slightly higher than average scores on chronic physical problems and adjustment problems generally, and thereby mediates the previously unexplained link between a nonwhite identity and a higher than average number of depressive symptoms.*

Addressing elevated depression scores among nonwhites who perceive discrimination in their lives requires addressing the perceived frequency of discrimination.

Psychosocial Resources and Health Inequalities

Given perceived discrimination and independent of its hazardous characteristics, extra explained variances (R-squares) and reliable regression coefficients (Table 11) do indicate the salience of psychosocial resources drawn from the social stress literature to reductions in health problems, but the effects are generally small. Self-efficacy reduces adjustment problems (low life satisfaction, depression symptoms) and physical problems (poor health and number of chronic physical problems); emotional support reduces adjustment problems (low life satisfaction, depressive symptoms). In addition, the resource included for its potential relevance to nonwhite coping-- action responses to discrimination-- also reduces adjustment problems. However, three things are remarkable.

- (1) The unanticipated, small increase in stress (number of negative life events) linked to action responses to discrimination.
- (2) The large amount of variance in adjustment problems (low life satisfaction, depression symptoms) explained by their negative link with self-efficacy.
- (3) The increase in the prediction of depression symptom scores from a nonwhite identity that followed taking into account a substantial reduction in depression linked to self-efficacy (Table 11 vs. Table 7).

In other words, taking action in response to discrimination experience(s) appears to proliferate stress but reduce adjustment reactions-- though the direction of the causality has not yet been tested—and among those who report discrimination, the remarkably positive effects of self-efficacy on adjustment problems appear limited to whites.

Risk-Buffering Effects of Psychosocial Resources on Health Inequalities

We explored interactions between discrimination hazards and psychosocial resources for potential buffers to negative health effects (regression coefficients in Table 12). Taking account of small increases in explained variance that accompanied introduction of the interaction term into the prediction equation, as well as reliable regression coefficients, we can tentatively say that:

- When discrimination experiences are frequent, high self-efficacy⁹ appears to reduce the average number of stress problems reported and low self-efficacy appears to increase the average number of negative life events.
- When discrimination experiences are frequent, action responses are linked to a higher than average current sense of poor health, and a disposition to not do anything is linked to more positive global ratings of health.

Conclusions

Our ongoing research seeks to identify social demographic, socioeconomic, cultural, and psychosocial factors that affect physical and psychological health. We are examining the relative contribution of statuses, beliefs, behaviors, and experiences-- singly and in combination-- to perceived social stress and health, and we are attempting to identify possible mechanisms and processes through which adaptive resources exert their effects. We are especially interested in the extent to which racial group membership predicts variations in these factors and in the possible health influences of racial discrimination, which has received little research attention (Thompson, 1996).

⁹ Adjusted for status conditions

The findings reported in this chapter clearly indicate that individuals who identify themselves as nonwhite are much more likely to report instances of racial discrimination over the course of their lifetime than are historically vulnerable white groups or whites in general. Whites do report discriminatory events, but there are few relationships between self-reported discrimination and health independent of racial-ethnic group membership and other social or economic conditions. Because the literature often gives discrimination as the reason for racial-ethnic disparities in health, it is important that the data analyzed here have shown that self-reported discrimination does not account for links between race-ethnicity and health-- or, for that matter, between social status and health. Although bivariate correlations link nonwhite identity to health problems, other structural variables-- status indicators-- mediate all but one of these relationships. There is tentative evidence that the remaining relationship-- between nonwhite identity and depressive symptoms-- is mediated among those reporting discrimination by the frequency of the discrimination experiences. There is also tentative evidence that a strong sense of self-efficacy can buffer the proliferation of stress among those coping with frequent discrimination.

On the other hand, generic psychosocial resources drawn from the stress process literature are independently and directly linked to lower than average reporting of health problems in the general population as well as among those reporting discrimination. These resource effects directly reduce stress and adjustment problems. Major depressive disorder and chronic physical problems can be directly or indirectly involved as well. Conversely, low generic psychosocial resources are directly linked to higher than average reporting of health problems. Health can also be independently predicted from specific psychosocial resources added for their relevance to nonwhite coping, but these predictions are largely attributable to social and economic status characteristics, or carry costs in stress proliferation or physical problems that require further study. In fact, psychosocial resources are not the only alternative to perceived discrimination in explaining the race/ethnicity-health problems connection in these data; social and economic resources play an even stronger role. However, statistically unreliable trends suggest that both

socioeconomic and psychosocial resources are less effective in protecting health among nonwhites.

In summary, race-ethnicity takes three distinct paths to inequalities in psychological health in these data. Discrimination-- its perception, frequency, and stressfulness-- and the moderation of these factors by psychosocial resources constitute one pathway. Even more striking in their effects are other paths, involving independent psychosocial and status resources. Not only are inequalities in the distribution of stress and adjustment problems at issue, but also chronic physical problems and major depressive disorder. Identifying more explicitly the mechanisms in these paths to health inequalities, determining variations in the pathways within racial-ethnic groups, and formulating interventions are clearly part of a future research agenda that must include larger numbers of nonwhites and vulnerable whites.

This future agenda also should include the use of a wider range of health problems (e.g. severe cognitive impairments, somatization and anxiety disorders, cardiovascular illnesses, substance dependency and HIV/AIDS); additional measures of stressful events, daily hassles, and other stressors-- race related as well as generic--; and race-related and generic coping responses (including denial and avoidance). The health effects of interactions among risk and protective factors, among their mediators and moderators, and across these predictive factors also require attention. Important to these plans is the development of stronger measures: collection of longitudinal data where there are causality issues; an expansion of socioeconomic concerns to encompass considerations of wealth, income diversity, and volatility; and an expansion of status relationships to include parenting, partnering, and social networks.

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Appendix

Discrimination Questions Asked in Wave III of the Americans

Changing Lives Survey 1994

N13. Now thinking over your whole life, have you ever been treated unfairly or badly because of your race or ethnicity?

1. YES 5. NO ---> NEXT PAGE, SECTION P

9

N13a. How often have you been treated unfairly or badly because of your race or ethnicity?

1. OFTEN 2. SOMETIMES 3. RARELY

N13b. In what year did that happen most recently?

_____ YEAR

9

N13c. What happened?

N13d. How stressful was this experience for you was it *very* stressful, *quite* stressful, *somewhat* stressful, or *not at all* stressful?

1. VERY 2. QUITE 3. SOMEWHAT 4. NOT AT ALL

N13e. How did you respond to this experience? Did you *accept it as a fact of life* or did you *try to do something about it*?

1. ACCEPT IT AS A FACT OF LIFE

2. TRY TO DO SOMETHING ABOUT IT

N13f. Did you *talk to other people about the experience* or did you *keep it to yourself*?

1. TALK TO OTHER PEOPLE ABOUT IT

2. KEEP IT TO YOURSELF