

# Research on Discrimination and Health: An Exploratory Study of Unresolved Conceptual and Measurement Issues

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Racial discrimination persists in the United States,<sup>1-3</sup> and perceptions of discrimination are associated with negative health outcomes,<sup>4-20</sup> whether discrimination is attributed to race or not and whether its targets are members of racial or ethnic minority groups or Whites.<sup>5,17-19</sup> Discrimination also helps to account for racial disparities in health.<sup>8-16</sup>

In this study, we focused on 4 core questions about potential race and socioeconomic differences relevant to assessments of discrimination. First, to what extent do White and Black, poor and nonpoor Americans understand race-based discrimination differently? Second, do these groups differ in their uncertainty about how to make sense of incidents of perceived unfairness, given that such attributional ambiguity can lead to health-damaging worry and rumination?<sup>5,20</sup> Third, do these groups differ in frequency of discrimination experiences across life domains? Finally, do they differ in the extent to which they attribute unfair treatment to racial versus non-race-based discrimination? Some researchers frame questions about discrimination in terms of unfair treatment and then ascertain the reason for the experience with a follow-up question,<sup>8,21</sup> but it is unclear whether questions framed in this manner truly capture racial discrimination.<sup>22</sup>

## METHODS

We derived our data from the YES Health Study, a quantitative and qualitative cross-sectional exploratory investigation conducted in a midwestern metropolitan area from 1999 to 2000. The sample consisted of 100 adults 25 to 55 years of age, 25 from each of 4 neighborhoods categorized according to racial group (White, Black, or African American) and household income (low socioeconomic status [SES], defined as  $\leq 150\%$  of the poverty line, and middle SES, defined as  $> 250\%$  of the poverty line). Details on the research methods

**Objectives.** Our goal in this study was to better understand racial and socioeconomic status (SES) variations in experiences of racial and nonracial discrimination.

**Methods.** We used 1999 and 2000 data from the YES Health Study, which involved a community sample of 50 Black and 50 White respondents drawn from 4 neighborhoods categorized according to racial group (majority Black or majority White) and SES ( $\leq 150\%$  or  $> 250\%$  of the poverty line). Qualitative and quantitative analyses examined experiences of discrimination across these neighborhoods.

**Results.** More than 90% of Blacks and Whites described the meaning of unfair treatment in terms of injustice and felt certain about the attribution of their experiences of discrimination. These experiences triggered similar emotional reactions (most frequently anger and frustration) and levels of stress across groups, and low-SES Blacks and Whites reported higher levels of discrimination than their moderate-SES counterparts.

**Conclusions.** Experiences of discrimination were commonplace and linked to similar emotional responses and levels of stress among both Blacks and Whites of low and moderate SES. Effects were the same whether experiences were attributed to race or to other reasons. (*Am J Public Health.* 2012;102:975-978. doi: 10.2105/AJPH.2012.300702)

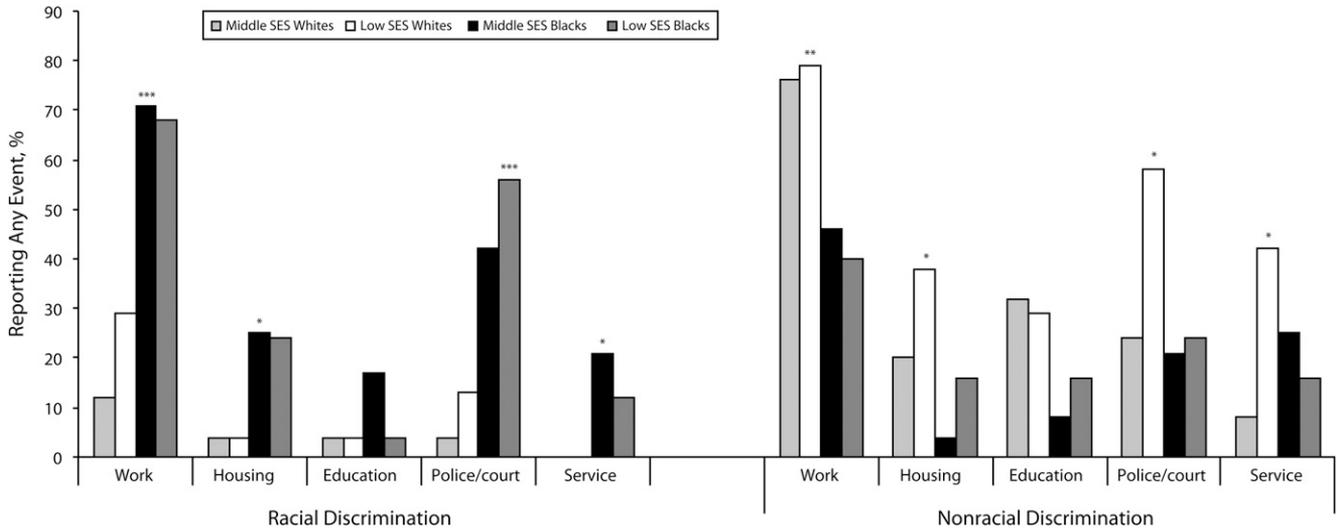
are available elsewhere.<sup>23,24</sup> The 50 Black respondents were sampled from 3 largely Black census block groups (1 of low SES and 2 of moderate SES). The 50 White respondents were sampled from 3 largely White census block groups (25 from moderate-SES groups and 25 each from 2 low-SES groups). Trained race-matched interviewers conducted face-to-face interviews.

Respondents were initially asked whether they had ever been treated unfairly or badly because of their race, ancestry, or national origin. They were then asked an open-ended question about what the word *unfair* meant to them. Next, a 19-item expanded version of the Major Experiences of Discrimination Scale<sup>8,21</sup> was used to assess lifetime discrimination in 5 domains: employment (unfairly fired, not hired, passed over for a raise, denied a promotion), housing (unfairly prevented from moving into a neighborhood, neighbors make life difficult, made to move out), education (unfairly discouraged by a teacher, denied a scholarship), police and courts (unfairly stopped, searched,

or questioned by police; physically threatened or abused by police; suspected or accused of doing something illegal), and service provision (unfairly denied a bank loan, denied medical care or provided worse care than others, receiving inferior service from a plumber or car mechanic). A residual open-ended "other" domain was also included.

Respondents indicated the frequency of occurrence for each event, and, for the most recent experience of each type, they reported their perception of the main reason for the experience (racial vs nonracial), how certain they were about this reason (certain [absolutely positive and pretty sure] vs having some doubt [somewhat doubtful and very doubtful]), and how they felt when it happened. They also rated the extent to which the most recent event was stressful on a scale ranging from 0 (not at all stressful) to 3 (very stressful).

Two coders analyzed responses to the open-ended question regarding the meaning of unfair treatment to uncover recurrent themes. All responses were categorized as to whether



Note. The percentages shown are the percentages of the sample reporting any of the types of racial and nonracial unfair treatment assessed within each broad domain. For each domain, Fisher exact tests were used to examine group differences in proportions of racial and nonracial events. \* $P < .05$ ; \*\* $P < .01$ ; \*\*\* $P < .001$ .

**FIGURE 1—Prevalence of perceived lifetime racial and nonracial discrimination, by race and socioeconomic status (SES): YES Health Study, 1999–2000.**

respondents’ definitions of unfair treatment reflected notions of inequality or injustice. We conducted bivariate analyses to explore levels of discrimination (racial and nonracial) across the 4 sampled neighborhoods. We then examined how attributional ambiguity, emotional responses, and stress ratings varied across the neighborhood groups. We used the Fisher exact test for categorical outcomes and analysis of variance (ANOVA) for continuous outcomes.

**RESULTS**

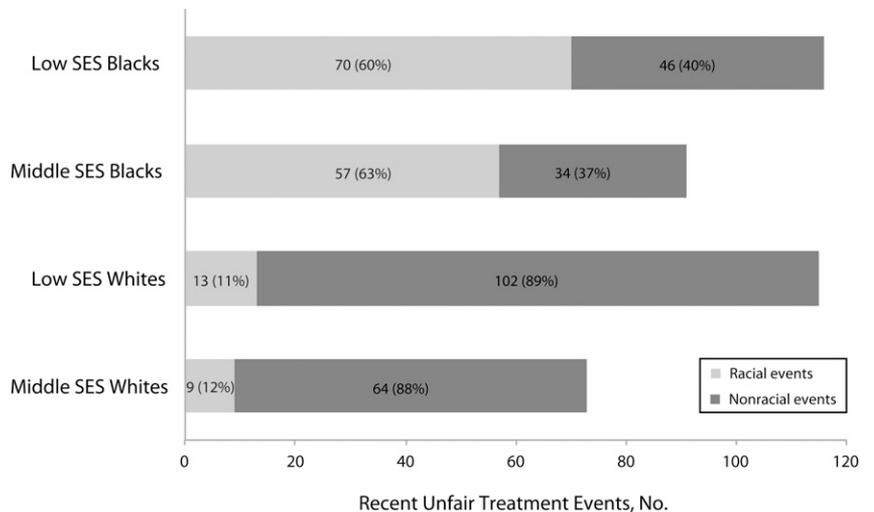
Ninety-three percent of the respondents described the meaning of unfair treatment in terms of inequality and injustice (e.g., as “unkind” and “unjust”). This pattern was consistent across racial and SES groups. Almost half of White respondents (47%) perceived unfair racial treatment as reverse discrimination (being denied opportunities because non-Whites receive preferential treatment). Blacks focused on unequal opportunities and being viewed as less capable or deserving.

Mean lifetime numbers of unfair experiences did not differ according to race (4.4 among middle-SES Whites, 5.9 among low-SES Whites, 5.8 among middle-SES Blacks, and 6.5 among low-SES Blacks;  $P = .27$ ). Black respondents viewed most of their unfair experiences as racial,

whereas White respondents typically viewed them as nonracial (Figure 1). Experiences of discrimination were more prevalent among individuals of low SES than middle SES (Figure 2).

We found little evidence of attributional ambiguity. Ninety-six percent of low-SES Black

respondents were certain in their attributions of events as racially based, as were 97% of low-SES White respondents and all middle-SES Black and White respondents. Similarly, 94% of low-SES Black respondents were certain in their attributions of non-race-based



Note. Percentages in parentheses represent the distribution of the most recent racial and nonracial events reported by each group. Levels are shown by counts of racial and nonracial events for each race-SES group (aggregated from the 19 potential types of discrimination experiences reported).

**FIGURE 2—Levels of perceived racial and nonracial discrimination, by race and socioeconomic status (SES): YES Health Study, 1999–2000.**

**TABLE 1—Reported Emotional Responses to and Stressfulness Associated With Experiences of Racial and Nonracial Discrimination: YES Health Study, 1999–2000**

Emotional response, %	Racial Discrimination				Nonracial Discrimination			
	Middle-SES Whites	Low-SES Whites	Middle-SES Blacks	Low-SES Blacks	Middle-SES Whites	Low-SES Whites	Middle-SES Blacks	Low-SES Blacks
	Angry	33	77	70	71	69	63	65
Frustrated	78	46	54	63	61	63	53	48
Sad	22	15	21	13	22	12	6	7
Powerless	11	23	19	34	30	27	29	11
Hopeless	0	8	4	9	8	11	3	7
Scared	11	23	11	9	13	16	9	9
Vulnerable	22	0	14	10	20	8	6	4
Humiliated	22	8	23	19	28	25	3	15
Vengeful	11	15	11	7	19	8	3	7
Inferior	11	15	12	4	13	10	6	4
Not surprised/resigned	22	8	25	29	22	9	29	9
Mean stressfulness score (range = 0–3) <sup>a</sup>	1.94	2.30	1.87	1.73	2.16	1.91	1.86	1.94

Note. SES = socioeconomic status. The percentages shown are based on denominators of total recent racial and nonracial unfair treatment events reported by each group. Column totals may exceed 100 because respondents could select multiple emotions.

<sup>a</sup>Group differences in average stressfulness scores assessed via analysis of variance were not statistically significant.

experiences of discrimination, as were 95% of low-SES White respondents, 90% of middle-SES Black respondents, and 92% of middle-SES White respondents.

Anger and frustration were the most common emotional reactions to discrimination (Table 1). This pattern was generally consistent across racial and SES groups. Experiences of discrimination were uniformly perceived as stressful, with no statistically significant variation across groups for either racial or nonracial events.

## DISCUSSION

Both Black and White respondents understood unfair treatment as capturing injustice, suggesting traditional understandings of discrimination. We also found that ambiguity about the cause of discrimination was rare. Levels of ambiguity could be higher for chronic experiences such as those captured by the Everyday Discrimination Scale,<sup>8</sup> a widely used instrument designed to capture discrimination.

Our finding that rates of reported discrimination were higher among low-SES Blacks and Whites than among their middle-class counterparts is inconsistent with previous

research.<sup>5,6</sup> This result may reflect the restricted SES range in our sample, the high stressor levels among disadvantaged Whites and Blacks, or our assessment of discrimination with a larger number of questions than typically used. We also found that Whites, particularly low-SES Whites, reported high levels of discrimination (mainly nonracial). Recent research indicates that when Whites live in economically deprived geographic contexts similar to those of African Americans, racial disparities in health are minimized.<sup>25–27</sup> The contribution of discrimination to the poor health of Whites of very low SES should be explored.

Neither emotional reactions to discrimination nor ratings of stressfulness varied markedly by race, SES, or type of discrimination, suggesting that the generic experience of discrimination generates psychological distress regardless of the attribution and the characteristics of the target. This is consistent with equity theory,<sup>28</sup> previous health research,<sup>29</sup> and recent neuroimaging studies.<sup>30</sup> The extent to which different reactions to discrimination may reflect perceptions of different types of moral violations<sup>31</sup> and lead to different disease pathways<sup>32</sup> is a priority for future research.

Our findings need to be replicated in larger, representative samples to improve the measurement of discrimination and understand its role in health. ■

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## Contributors

D. R. Williams, D. Oyserman, and J. S. Jackson originated the study. D. A. John, J. Sonnega, and S. A. Mohammed conducted the analyses. D. R. Williams led the writing of the article, and all of the authors assisted with the writing and with interpretation of the findings.

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### Human Participant Protection

The YES Health Study was approved by the University of Michigan institutional review board. Participants provided written informed consent.

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