THE RELATIONSHIP OF RACISM TO APPRAISALS AND COPING IN A COMMUNITY SAMPLE

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Ethnicity-related maltreatment (racism) is a significant stressor for many Americans and may contribute to racial disparities in health. Mechanisms linking this stressor to health status are not yet understood. This study tests the hypothesis that lifetime exposure to racism influences individuals' appraisals of and coping responses to new episodes of maltreatment. Participants included 420 Black and Latino patients and staff of community primary care practices in New York City. Participants completed the Brief Perceived Ethnic Discrimination Questionnaire – Community Version. They also completed measures of appraisals and anger coping modified to inquire about responses to new episodes of ethnicity-related maltreatment. Individuals who had higher levels of lifetime exposure to discrimination were more likely to experience new episodes as threatening and potentially harmful. Exposure to ethnic discrimination was also positively related to the use of anger coping styles, but the magnitude of the relationship varied depending on the type of discrimination. Individuals who had been exposed to higher levels of workplace discrimination were more likely to suppress anger in new situations. Those who were exposed to ethnicity-related social exclusion or harassment were more likely to confront others and aggressively express their feelings. The significance of the relationship held even when controlling for mood and personality variables that might account for both racism and coping. No differences were found between Blacks and Latinos in the relationship of racism to appraisals and coping. These findings add to the growing empirical literature on strategies for coping with racism. (*Ethn Dis*. 2005;15 [suppl 5]:S5-14–S5-19)

Key Words: Racism, Appraisals, Coping, Ethnicity-Related Stress

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INTRODUCTION

Racism has been defined as "the beliefs, attitudes, institutional arrangements, and acts that tend to denigrate individuals or groups because of phenotypic characteristics or ethnic group affiliation."[1] The more general term of ethnic discrimination has been defined as unfair treatment received because of one's ethnicity.[2] Racism or ethnic discrimination has been identified as one of the potential stressors that may contribute to racial and ethnic disparities in health.[1,3–5] However, the mechanisms through which racism may contribute to increased risk for health-related disorders remain unclear.

Recently, investigators have begun to examine the health effects of racism with the stress and coping framework developed by Lazarus and Folkman.[1,6,7] This model suggests that racism may influence health in part through its effects on appraisal and coping processes. A variety of methods categorize the strategies used to cope with exposure to ethnic discrimination. Some researchers have focused on cognitive aspects of coping, contrasting orientation, and attitudes toward one's own group with those toward the majority culture.[8,9] Others have used frameworks drawn from traditional stress and coping models[6] and compared problem-focused coping, aimed at addressing perceived injustice, with emotion-focused coping, aimed at reducing the distress elicited by these events.[10–12]

Other researchers[13,14] have examined anger-coping, evaluating the degree to which individuals suppress or express their response to racist events. Consistent with this approach, we focused primarily on strategies used to manage the anger evoked by exposure to ethnic discrimination. Data using a variety of methods confirm that exposure to ethnic discrimination evokes anger.[15] Variations in anger coping appear to influence the effects of exposure to racism on the blood pressure level.[13]

Investigators have classified the strategies individuals use to cope with anger along two major dimensions.[14,16] The first varies in the direction of expression, contrasting the degree to which the individual aggressively and outwardly expresses (Anger-Out) versus suppresses (Anger-In) feelings of anger. The second dimension evaluates the degree to which the individual uses cognitive mediation to manage anger (i.e., uses Anger-Control/Anger-Reflection) before suppressing or expressing the feelings (i.e., Anger-In and Anger-Out).[14] Variations in the use of these anger-coping strategies have health implications, particularly for cardiovascular diseases and, depending on the context, particularly for African Americans.[17]

Differences of opinion exist about the degree to which coping is a moderator versus a mediator of the relationship of racism to distress or health.[8,18] This distinction is important because viewing coping as a moderator implies that coping strategies emerge independently from the stressor. However, coping strategies also may develop as a function of the severity or nature of the stressor and consequently serve as a mediator influencing the outcome of exposure to racism. In this study we assess the degree to which racism influences the use of different coping strategies, specifically examining whether exposure to different types and intensities of racism influences the individual's appraisals of and

coping with ethnicity-related maltreatment.

This hypothesis emerges from literature that suggests background stressors influence the ways in which new stressors are appraised or perceived.[19,20] When stressors are uncontrollable or of high intensity, individuals may become sensitized, making them more likely to appraise or view new episodes as threatening or harmful. Racism may be experienced as a high intensity stressor since discrimination can affect both social relationships and economic opportunity.[21] Racism may also be experienced as an uncontrollable stressor, since a consensus has not been reached on the best methods for handling race-related interpersonal maltreatment,[10] and costs (ie, disapproval, retaliation, anxiety, etc.) may exist for every response.[22]

Appraisals may influence the ways in which individuals cope with stress exposure. When situations are perceived as highly threatening, individuals may have a greater need for immediate resolution or closure. The need for closure may be intensified when the nature of the threat is ambiguous,[23] as is often the case in racist interactions in the modern environment.[24] Cognitively mediated anger-coping responses to manage distress may be more difficult to use when events are perceived as highly threatening, particularly if they are ambiguous. Consequently, the more individuals have been exposed to ethnicity-related maltreatment, the more likely they may be to reflexively or immediately suppress or express their anger.[14]

This study examined the relationship of lifetime exposure to racism to appraisals and anger-coping responses in a community sample of Black and Latino adults. We focused on interpersonal (as opposed to institutional) aspects of racism/ethnic discrimination. Interpersonal racism has been defined as "directly perceived discriminatory interactions between individuals whether in their institutional roles or as public and private individuals."[25] The analyses address four questions: Does past exposure to ethnic discrimination influence appraisals of and coping responses to new episodes of ethnicity-related interpersonal maltreatment? Do appraisals mediate the relationship of ethnic discrimination to coping? Are these relationships a function of personality or mood? Do ethnic differences (i.e. between Blacks and Latinos) exist in the relationship of discrimination to coping?

METHODS

Participants

Participants included patients, staff and community members recruited from community/migrant health centers (C/MHCs), which are primary healthcare practices located in low-income urban areas of New York City, affiliated with Clinical Directors Network (CDN). CDN and its member C/MHCs provide comprehensive and accessible community-oriented healthcare services and clinical research opportunities for poor, minority, and under-served populations and the clinicians who provide their primary care. The total sample is comprised of 420 individuals, including 205 Black women, 102 Black men, 85 Latino women and 28 Latino men. The mean age of the participants was 39.92 (standard deviation [SD] 10.55) years with a range of 25–78 years. As both patients and staff were included in the study, participants came from a broad range of educational backgrounds from less than high school to graduate school. Most of the sample (n = 302) was American-born. Fifty-nine indicated they were foreign born, and the remainder did not provide this information.

Measures

A brief demographics questionnaire was administered to obtain information on self-reported ethnicity/race, gender, age, marital status, place of birth, household income, highest level of education, and employment status among other variables.

The Brief Perceived Ethnic Discrimination Scale-Community Version (PEDQ-CV) is a 17-item measure that assesses lifetime experiences of ethnic discrimination within a social or interpersonal context.[26] The items assess the everyday experiences of community-dwelling adults. The scale is designed to be used with any ethnic group and has been validated for use with Latino and Black samples.

On the first page of the full and brief PEDQ-CV, participants indicate their ethnicity or race. The remainder of the questions begin with the statement: "Because of my ethnicity ...," and are followed by an item describing exposure to some form of mistreatment or difficulty (eg, "... a clerk or waiter ignored me"). Participants were asked to indicate how often they had ever had these experiences during their lifetime, and each item was rated on a five-point Likert-type scale; a response of 1 indicated that the event never happened, and a response of 5 indicated the event happened very often. The full 17-item scale has good psychometric properties with an internal consistency in this sample of .88, and strong preliminary evidence supports the construct validity of the lifetime exposure scale.[26] The scale contains four subscales of four items each that assess different dimensions of ethnic discrimination: social exclusion, discrimination at work, threat or harassment, and stigmatization. Reliability coefficients for the scales range from .70 to .78.

To assess appraisals of discrimination, participants were asked to indicate how they felt when they were treated badly because of their ethnicity or race. Appraisals were based on items drawn from a list of emotions related to appraisals of threat (ie, worried, anxious, fearful) and harm (ie, angry,

disappointed, guilty).[6] The means for the items were obtained to create an appraisal scale score. In this sample, the alpha for the appraisal of threat scale was .66 and for the appraisal of harm scale was .75.

Situation-specific anger-expression style was assessed with an adaptation of the Spielberger Anger-Expression scales[16] adapted to include the heading "When you are treated badly because of your race or ethnicity what do you usually do?" This is a self-report inventory with three scales measuring anger coping. The Anger-Out scale includes items measuring the tendency to directly and aggressively express anger. The Anger-In scale includes items that measure the tendency to suppress the outward expression of anger. The Anger-Control scale includes items assessing the ability to calm down and reflect upon anger-evoking experiences. The Anger-In, Anger-Out, and Anger-Control subscales have known and good internal consistency and validity.

Both perceptions of discrimination and anger coping style can be influenced by mood and personality factors.[16,26] To permit us to control for these individual differences, we include measure of negative affect and cynical hostility. Negative affectivity was measured with the Negative Affectivity scale from the Positive and Negative Affect Schedule (PANAS).[27] It is a 10-item scale, which has shown reliabilities of 0.84 to 0.87 and has excellent convergent and discriminant validity. Participants rate items on a five-point scale to communicate the extent to which they had experienced each mood state during a specified time frame. Mood states include: distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, and afraid.

Cynical hostility is assessed with the Cynicism and Hostile Attribution subsets of the MMPI-based Cook and Medley hostility scale (Ho)[28] as identified by Barefoot et al.[29] These subsets reflect cynical beliefs about fairness and justice as well as a tendency to interpret the behavior of others as intended to harm the respondent. Barefoot et al[29] demonstrated acceptable convergent and discriminant validity of these subsets.

Procedure

We solicited the assistance of three CDN-affiliated primary healthcare practices located in low-income urban areas of New York City. The practices serve patients from a range of socioeconomic backgrounds, including patients who are severely impoverished, as well as those who are working and middle-class.

Data were collected at two points in time as part of two different studies. For data collected in 2001, the principal investigator (EB) made a presentation to all patients in the waiting room, describing the purpose and methods of the study. Trained Black and Latino graduate students administered questionnaires. The only eligibility requirement was that participants be capable of understanding English. Interested volunteers were given a packet consisting of an information sheet and all study questionnaires. Participants were asked to read and complete the questionnaires on their own but were told that research team members were available to assist as necessary. If participants could not read English, the questionnaires were read to them. More than 90% of English-speaking patients agreed to complete the measure, and all but 10 were able to complete the questionnaires independently. Primary care practice staff members were approached individually at their work stations by research team members, and all those not directly engaged in patient care agreed to complete the questionnaires.

From 2003 to 2005, data were collected from participants who were volunteering for a larger study of racism, coping, and ambulatory blood pressure. Since these data were collected during the screening examination for the larger study, participants were excluded if they were not American-born and were not between the ages of 25 and 65. Questionnaires were presented individually to each participant via computer. Each item was presented on the screen and was audible through earphones. Scale completion required 10–15 minutes. All participants in both phases of data collection were provided with gift bags worth ≈$5.00.

Statistical Analysis

Pearson correlations were calculated to assess zero-order relationships among lifetime ethnic discrimination, appraisals, and coping. Hierarchical multiple regression (HMR) analyses were employed to evaluate the relationship of the subscales of the Brief PEDQ to appraisals and coping. Covariates, forced into the equation before the cluster of Brief PEDQ subscales included age, race (Black or Latino), and gender. Procedures described by Baron and Kenney[30] were used to determine if appraisals mediate the relationship of ethnic discrimination to anger coping.

Results

Demographic Variations

Table 1 displays means and SDs for each measure for the full group and separately by ethnicity and gender. Significant gender differences were seen in perceived ethnic discrimination. In comparison to women, men had higher scores on the lifetime exposure scale as well as the subscales assessing ethnicity-related exclusion, stigmatization, and harassment, but not workplace discrimination. There were no gender differences in scores on measures of appraisals or anger coping.

No significant correlations of age were seen with scores on the full scale or any subscale of the Brief PEDQ-CV. Age was weakly negatively correlated with appraisals of threat ($r=-.12$, $P<.01$), but not harm ($r=-.04$, nonsignificant). Age was weakly positively related to Anger-Calm

Table 1. Means and standard deviations for major study variables for full groups and by ethnicity and race

Measures	alpha	Overall Mean (*n*=420)	Blacks (*n*=307)	Latinos (*n*=113)	Men (*n*=130)	Women (*n*=290)
Brief PEDQ-CV and subscales						
BPEDQ total	.89	2.12 (.68)	2.15 (.66)	2.05 (.71)	2.28 (.72)	2.05 (.65)†§
Excluded‡	.73	2.66 (.89)	−2.71 (.89)	2.51 (.88)*‡	2.79 (.93)	2.60 (.87)*§
Threat and Harassment	.77	1.71 (.83)	1.72 (.82)	1.69 (.84)	1.87 (.85)	1.64 (.81)†§
Stigmatization	.78	1.80 (.83)	1.80 (.84)	1.77 (.83)	1.96 (.94)	1.72 (.77)†
Work Discrimination	.70	2.27 (.86)	2.29 (.86)	2.20 (.88)	2.34 (.81)	2.23 (.88)
Appraisals						
Threat	.66	2.45 (1.04)	2.44 (1.04)	2.49 (1.07)	2.54 (1.12)	2.41 (1.01)
Harm	.75	3.31 (1.35)	3.31 (1.35)	3.23 (1.34)	3.29 (1.35)	3.32 (1.35)
Anger-Coping						
Anger-In	.79	2.65 (1.00)	2.63 (1.00)	2.70 (1.00)	2.70 (0.99)	2.63 (1.00)
Anger-Out	.85	2.74 (1.04)	2.72 (1.03)	2.80 (1.04)	2.71 (1.05)	2.75 (1.03)
Anger-Calm	.80	3.09 (.97)	3.11 (.96)	3.05 (1.01)	3.12 (0.97)	3.08 (.97)

* $P<.05$.
† $P<.01$.
‡ Results of ANOVA testing ethnicity differences.
§ Results of ANOVA testing gender differences.

(r=.14, $P<.01$), but unrelated to Anger-In or Anger-Out ($r<.05$).

Blacks had higher scores than Latinos on the Brief PEDQ subscale of social exclusion. No other differences were seen between Blacks and Latinos on any measure of perceived ethnic discrimination, appraisals or coping. Controlling for ethnicity, gender, and age, place of birth was not significantly related to ethnic discrimination, appraisals or coping (all Ps>.05). Consequently, gender, age and race/ethnicity were included as covariates in all subsequent HMR analyses.

Correlation among Variables

The subscales of the Brief PEDQ-CV were significantly interrelated (r=.43-.56, Ps<.0001). As shown in Table 2, appraisals of threat and harm are significantly related. Anger-In is weakly positively related to Anger-Out and closely related to Anger-Calm. Anger-Out is unrelated to Anger-Calm.

Pearson correlations displayed in Table 2 reveal that lifetime exposure to ethnic discrimination is positively associated with the tendency to view new situations as threatening and potentially harmful. Ethnic discrimination is also positively correlated with Anger-In and Anger-Out and weakly positively correlated with Anger-Calm. Given the substantial correlation between Anger-In and Anger-Calm, we examined the correlation of scores on the Brief PEDQ-CV to Anger-Calm controlling for Anger-In and found that the effect is no longer significant (r=.01). Perceptions of threat and harm are positively associated with the use of anger suppression (Anger-In) and aggressive anger expression (Anger-Out) and weakly associated with Anger-Calm.

HMR analyses indicate that the group of four Brief PEDQ-CV subscales predict 17% of the variance for appraisals of threat and 22% of the variance for appraisals of harm, above that accounted for by the covariance. Exposure to ethnicity-related social exclusion (β=.21, t=3.00, $P<.01$), threat and harassment (βß =.16, t=2.38, $P<.05$) and workplace discrimination (β=.19, t=2.67, $P<.01$) are positively associated with appraisals of threat. Similarly, exposure to social exclusion (βß =.26, t=3.82, $P<.001$) and workplace discrimination (βß =.27, t=4.14, $P<.001$) are positively associated with appraisals of harm. As shown in Tables 3a and 3b, HMR analyses indicate that the group of four subscales account for 10% of the variance in Anger-In and 12% of the variance in Anger-Out. Workplace discrimination is positively associated with Anger-In, whereas social exclusion is positively associated with Anger-Out.

To determine if appraisals mediate the relationship of discrimination to anger coping, the analyses were repeated with the threat and harm appraisal scales forced into the HMR prior to the entry of the group of four Brief PEDQ subscales. With the appraisal scores in the equation predicting Anger-In, the

Table 2. Intercorrelations among variables

	BPEDQ (*n*=420)	Appraisals of Threat	Appraisals of Harm	Anger-In	Anger-Out
Appraisals of threat	.41†				
Appraisals of harm	.39†	.49†			
Anger-In	.30†	.35†	.39†		
Anger-Out	.29†	.26†	.39†	.15*	
Anger-Calm	.15*	.23†	.23†	.44†	.01

Note: * $P<.01$.
† $P<.0001$.

Tables 3a. HMR analyses: PEDQ subscales predicting appraisals of anger-in

Variable	Parameter Estimate	Standard Error	Standardized Estimate	t
Gender	−.02	.10	−.01	−.28
Age	.00	.00	.03	.73
Race	.11	.11	.05	1.07
Exclusion	.06	.07	.05	.82
Threat and harassment	.06	.07	.05	.92
Stigmatization	.07	.07	.06	1.04
Workplace discrimination	.25	.07	.22	3.56*

Note: For full model R^2=.10, adjusted R^2=.09, $P<.0001$. For group of four subscales partial R^2=.098, $P<.0001$.
* $P<.001$.

positive effect of workplace discrimination ($P<.05$) remains significant, but the group of PEDQ subscales now account for only 2% versus 10% of the variance. With the appraisal scores in the equation predicting Anger-Out, the negative effects for workplace discrimination ($P<.001$) and the positive effects for social exclusion ($P<.001$) remain significant, but the group as a whole now accounted for 6% of the variance rather than 12%. This finding suggests that appraisals partly mediate the effects of ethnic discrimination on coping, such that perceiving events as threatening or harmful increases the likelihood that individuals will use more immediate and reflexive anger coping.

Personality and Mood Controls

Negative mood or a hostile personality style may account for both the level of exposure to discrimination and the use of a particular anger coping style. Consequently we controlled for cynical hostility and negative mood in a series of HMR analyses performed on the 2004–2005 data set that contained 199 individuals with complete data. With cynical hostility and PANAS (Positive and Negative Affect Schedule)-negative mood forced into the equation predicting Anger-In, the group of 4 Brief PEDQ subscales accounts for 7% of the variance and the workplace discrimination variable remains significant (β=.23, $P<.01$). With cynical hostility and PANAS-negative mood forced into the equation predicting Anger-Out, the group of 4 Brief PEDQ subscales accounts for 10% of the variance and the exclusion subscale (β=.36, $P<.02$) and the threat subscale (βß=.16, $P<.05$) remain positively related and the work discrimination subscale remains negatively related (ß=−.20, $P<.05$). These findings suggest that the effects of ethnic discrimination on coping are largely a function of the nature of the stressor and not a function of individual differences in personality or current mood.

No significant interactions of ethnicity were seen with Brief PEDQ in predicting appraisals or anger-coping style. This finding suggests that the effects of ethnic discrimination on appraisals and coping are similar across the ethnic groups.

Table 3b. Hierarchical multiple regression analyses: PEDQ predicting anger-out (R^2=.12; adjusted R^2=.10; F(7.458)=8.72, $P<.0001$)

Variable	B	SE	ßβ	T
Gender	.13	.11	.06	1.20
Age	−.00	.00	−.00	−.07
Race	.07	.11	.06	1.25
Ethnicity-related exclusion	.36	.07	.31	4.92†
Ethnicity-related threat and harassment	.12	.07	.09	1.67
Ethnicity-related stigmatization	.13	.07	.10	1.77
Workplace discrimination	−.18	.07	−.15	−2.45*

Note: R^2=.13, partial R^2=.11, $P<.0001$, for the group of four Brief PEDQ subscales partial R^2=.12 ($P<.0001$).
* $P<.05$.
† $P<.0001$.

DISCUSSION

Racism is a significant psychosocial stressor hypothesized to influence health outcome.[1] This study examined some potential psychosocial pathways through which racism might exert effects on health. In a relatively large community sample comprised of Black and Latino(a) adults, we examined the effects of different dimensions of racism on appraisals and coping. The findings indicate prior exposure makes individuals more likely to perceive future occurrences as threatening or harmful. People do not appear to "get used to" racism. In turn, perceiving interactions as threatening and harmful increases the likelihood that individuals will use reactive or immediate anger management styles. Workplace discrimination appears to increase the likelihood of using an anger-suppression style, a style that has been associated with increased risk for hypertension in Black men. In contrast, social exclusion is associated with an increased likelihood of using Anger-Out, a more aggressive style of coping with anger. These effects are relatively independent of personality and mood, indicating that features of the stressor determine the use of particular coping styles. Blacks and Latinos respond similarly, which suggests that the effects of discrimination on coping are similar across at least these targeted groups. The findings support models of social stress and health, which emphasize long-term effects of emotionally demanding social stressors.[20]

This study has several limitations. The sample is a sample of convenience drawn from medical centers. These effects should be evaluated in a population-based group. The measures of anger coping reflect self-report only, not what individuals actually do when confronted with ethnicity-based maltreatment. However, studies of health effects of anger coping have also relied on self-report measures, which suggests that these measures tap dimensions of importance. Third, we did not assess the degree to which these appraisals and coping strategies might vary depending on the degree to which the expression of racial bias was overt or covert and the degree to which the situation was perceived as highly likely to inflict harm. This study supports the notion that racism, independent of at least some aspects of personality and mood, influences perceptions and responses to new stressors. Future research needs to evaluate further the ways in which variations in the nature of new racist interactions influence appraisals and coping, and in turn how these effects influence health outcomes. Understanding the ways in which racism influences coping can provide guidance for psychosocial interventions to reduce health disparities.

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