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Buffers of Racial Discrimination: Links With Depression Among Rural African American Mothers

The current study examines racial discrimination as a predictor of depression in a sample of 414 rural, low-income African American mothers of young children. The potential moderating role of optimism and church-based social support was also examined. Mothers completed questionnaires when their child was 24 months old. Hierarchical regression revealed that mothers' perception of racism was a significant predictor of depression even after controlling for a variety of distal demographic characteristics and environmental stressors. Significant interactions suggested the importance of psychological and social characteristics in understanding maternal depression. Specifically, high levels of optimism and church-based social support buffered mothers from increased depressive symptomology attributable to perceived racism.

Recent reports indicate that nearly 20% of the U.S. population, primarily women, will experience depression at some point in their lifetime

(Centers for Disease Control and Prevention, 2006; Hammen, 2003b; Kessler, 2003). A particularly vulnerable time for women to experience depression is during the early years of childrearing (Hammen, 2003b; Jones & Ford, 2008). In fact, over a third of mothers caring for toddlers suffer from symptoms of depression (McLennan, Kotelchuck, & Cho, 2001). This is of great concern because depression may have profound negative consequences for parenting and child development (Field, Hernandez-Reif, & Diego, 2006; National Institute of Child Health and Human Development [NICHD], 1999). Despite the high prevalence of traditional sociodemographic risk factors for depression, including low income, unemployment, limited education, and single parenthood within the African American community, there is a paucity of studies on depression among African American mothers (Brown, Brody, & Stoneman, 2000; Carrington, 2006; McLoyd & Enchautegui-de-Jesus, 2005).

In this study, we move beyond sociodemographic risk factors and suggest that racial discrimination may serve to undermine African American women in their role as mothers, eroding their self-esteem and self-efficacy and putting them at increased risk for depression (Belle & Doucet, 2003; Carrington, 2006; Jones & Ford, 2008). Though less overt today than in previous generations, racial discrimination continues to be a primary source of personal and

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family stress in the African American community (Murry, Brown, Brody, Cutrona, & Simons, 2001; Williams, 1999). Surprisingly, the psychosocial resources that African American mothers may use to buffer the depressive effects of racism have scarcely been examined. This is an important omission, given that mothers with strong personal and social resources may be better able to withstand the chronic stress associated with racial discrimination (Belle & Doucet, 2003; Siefert, Finlayson, Williams, Delva, & Ismail, 2007). The purpose of this paper is to examine the association between racial discrimination and maternal depression in a representative sample of rural African American mothers and to explore optimism and church-based social support as possible mechanisms that might buffer mothers from the negative mental health effects of racism.

Consistent with ecological systems theory (Bronfenbrenner, 1989; Bronfenbrenner & Evans, 2000), this study examines distal and proximal processes that may be important in understanding the mental health of African American women living in the rural South. Distal demographic factors have been linked to depression but do not tap the possible causal processes that are linked to mental health. Thus, we examined racial discrimination as a unique psychological proximal process that is developed through interactions with others over time in the lived experiences of African American mothers. Although the origins of racial discrimination may be contextually distal, occurring in multiple contexts such as employment, the justice system, and commercial transactions, the impact can be temporally proximal. Arousal associated with racism and the anticipation of future racist experiences may be linked to maternal depression (Jones & Ford, 2008; Pearlin, Schieman, Fazio, & Meersman, 2005; Peters & Massey, 1983). Ecological systems theory also allows for the consideration of health-promoting characteristics that may buffer the disruptive effects of stress on mental health (Bronfenbrenner). We examined whether the association between racial discrimination and maternal depression varied as a function of personal and social supports, including optimism and church-based support. Thus, the review that follows explores the complexities of motherhood within rural African American communities and discusses previous research regarding various contextual stressors in understanding maternal depression, with a

specific focus on racial discrimination. We also review findings regarding the buffering effects of optimism and church-based social support on the association between maternal depression and racial discrimination.

Maternal Depression and Experiences of Racial Discrimination

Researchers and theorists have documented that African American women may become depressed in response to an accumulation of psychosocial stressors within their environments (Brown et al., 2000; Carrington, 2006; McLoyd, 1990; Murry et al., 2003). African American women, particularly those living in the rural South, face distinct stressors that may be associated with depression (Brown et al.). The social isolation of rural contexts, scarcity of economic resources, limited availability of rural health care providers, and limited access to child care may place rural African American mothers at increased risk for depression relative to their urban counterparts (Brody, Neubaum, Boyd, & Dufour, 1997; Bushy, 1998; Carrington; Vernon-Feagans, Gallagher & Kainz, in press). Rural African American women are also exposed to the additional stress of racial discrimination, which has been consistently linked to greater risk for depressive symptomology and major depressive episodes (Belle & Doucet, 2003; Schulz et al., 2006; Siefert et al., 2007; Williams, Neighbors, & Jackson, 2003). Moreover, some researchers suggest that chronic stress that is perceived as uncontrollable, such as racial discrimination, may amplify the negative effects of time-limited events, such as loss of a job or divorce (Clark, Anderson, Clark, & Williams, 1999; Grote, Bledsoe, Larkin & Brown, 2008; McLoyd).

Few studies have focused on rural African American mothers of young children and how they deal with race-related stress (for exceptions of studies on African American mothers of adolescents, see Brody et al., 2008; Murry et al., 2001). In the rural context, where women's family roles may be more traditional, African American women may be socialized to become "superwomen." African American women may engage in self-sacrificing behaviors in their role as mothers, tending to the needs of young children (i.e., caretaking, monitoring, and engaging in play) and the household at the expense of their own mental and physical

health (Grote, Clark, & Moore, 2004; Jones & Ford, 2008; Murry et al., 2003).

It may be particularly consequential to consider racial discrimination as a risk factor for depression when children are young. During the childbearing years, women may be overwhelmed with the stressors associated with their role as a new parent, while juggling a romantic partnership and work stressors (Hammen, 2003a). Adjustment difficulties to race-related stressors during periods of heightened emotional stress (i.e., caring for young children) may be especially pronounced because of the distinctly harmful ways in which racism erodes the quality of life and perpetuates the expansion of stressors into other domains of life, which sets the stage for later episodes of depression (Grote et al., 2008; Hammen, 2003b; Murry et al., 2001). Furthermore, maternal depression has been shown to be strongly associated with children's behavior disorders (NICHD, 1999; McLoyd, 1990). The cascading effect of depression from caregivers to their children through the disruption of parent-child interactions and communication suggests that culturally specific factors, like racial discrimination, should receive greater empirical focus (Brody et al., 2008; Field et al., 2006; Lovejoy, Grazyk, O'Hare, & Neuman, 2000; Murry et al., 2001).

Optimism and Church-Based Social Support as a Buffer to Racial Discrimination

Although racial discrimination and low socioeconomic resources increase the likelihood of poor mental health, not all African American women living in psychosocially stressful contexts suffer from depression. African Americans have adapted numerous coping resources to manage stress associated with racial discrimination, yet few studies have explored factors that enable African American mothers to function effectively in spite of racism (Grote, Bledsoe, Larkin, Lemay, & Brown, 2007; Jones & Ford, 2008). Mothers who are able to draw on coping strategies when dealing with racism may be buffered against depression (Clark et al., 1999; Lazarus & Folkman, 1984). Theorists note that the appraisals of and responses to experiences of racism are guided by cultural coping scripts that arise from psychological and social resources (Utsey, Giesbrecht, Hook, & Stanard, 2008). In the African American community, optimism and church-based support may serve as psychosocial

resources that promote positive expectations as well as provide a cognitive framework for understanding stress associated with racial discrimination (Barbarin, 1993; Mattis, Fontenot, & Hatcher-Kay, 2003; Utsey et al.).

Optimism is the generalized expectancy that one will experience good outcomes in the future (Scheier & Carver, 1992). Optimism reflects the characteristics of hope and a positive expectation that enables individuals to persevere through difficult situations (Utsey et al., 2008). Under certain oppressions like racial discrimination, goals are consistently blocked by individuals (i.e., boss passing you over for a promotion because of your race) or contextual deterrents (i.e., fewer jobs or chances for economic mobility within a community). Individual differences in psychological resources such as optimism may determine if an individual will strive to pursue goals even in the face of conditions of extreme adversity (Scheier & Carver, 1992). Bromberger and Matthews (1996) found that, among 460 middle-aged women who experienced acute and chronic stressors, those who were optimistic were less likely to report depressed mood than those who were pessimistic. More recently, among urban low-income African American and White women, Grote and colleagues (2007) found that high levels of optimism buffered the association between acute and chronic stress exposure and depression severity. Scott (2003) reported that African American adults high in optimism demonstrated more self-reliance and problem-solving coping in response to perceived racism. Thus, we expected that mothers who were optimistic would be buffered from experiencing depression associated with racial discrimination.

Even in the presence of optimism, encounters with everyday racism may affect an individual's dispositional style. External supports may facilitate coping and the self-management of physical and behavioral responses to experiences of injustice. In the African American community, religious institutions have played a key role in efforts to dismantle discriminatory laws and practices, serving as both psychological and instrumental support for individuals (Chatters, 2000). Although many studies show a direct effect of religion on mental health, fewer studies have explored church-based social support as a buffer, particularly against experiences of discrimination (Chatters, 2000; Hackney & Sanders, 2003; Ellison, Musick, & Henderson,

2008). Negative psychological effects of racism may be countered through interactions with clergy and church members who validate an individual's self-worth through spiritual support, consolation, healing words, and attempts to boost morale (Krause 2002b; Taylor & Chatters, 1988; Taylor, Lincoln, & Chatters, 2005). Church leaders and co-congregationalists may draw upon their own experiences and help victims of racism identify formal and informal resources, including referrals for assistance, clever responses, coping strategies, or even legal recourse (Chatters, 2000; Krause, 2002a). Krause and Tran (1989) suggested that although life stress erodes feelings of mastery and self-esteem among African Americans, the negative effects are offset by organizational factors of religious involvement. Bierman (2006) also showed that attending religious services buffered African Americans from the effect of perceived racism on negative affect. More recently, Ellison and colleagues showed a direct negative association between congregational support and psychological distress, partially offsetting the negative effect of racial discrimination among African Americans. Given the historical significance and salience of religion among southern African American women (Chatters, Taylor, Jackson, & Lincoln, 2008), the present study investigates whether church-based social support serves as a buffer against the effect of racism on depression.

Our theoretical model postulates that distal sociodemographic and environmental stressors will account for significant variance in predicting maternal depression. We expected racist experiences to be associated with maternal depression even after accounting for most of the important sociodemographic and perceived environmental stressors that have been previously linked to depression. We accounted for family income-to-need ratio, maternal education, hours worked per week, marital status, and the number of children in the household because previous research suggests that these poverty-related factors are positively associated with maternal depression and decreased access to resources that buffer mothers from stressors (Belle & Doucet, 2003; McLoyd, 1990; Siefert et al., 2007). Furthermore, there is evidence that stressful life events often provoke depressive episodes (Hammen, 2003b). As a result, we also accounted for perceived economic strain and negative life events prior to exploring the main effect of racial discrimination.

We examined the following questions: (a) Does racial discrimination predict maternal depression above and beyond other important social and economic distal characteristics? We predicted that racial discrimination would contribute unique variance to maternal depression. (b) Do optimism and church-based social support moderate the effect of racial discrimination on depression after accounting for other distal social and economic maternal characteristics? We expected that in the context of high racial discrimination, mothers with low optimism and low church-based social support would experience higher levels of depression than mothers with higher optimism and higher church-based social support.

METHOD

Participants

These data come from the Family Life Project (FLP). The FLP is a representative sample of every baby born to a mother who resided in one of six low-wealth, rural counties in North Carolina and Pennsylvania over a 1-year period (2003–2004), oversampling for African American and poverty. FLP is an ongoing, longitudinal study examining the implications of rurality, economic resources, and family relationships for young children's development. For 1 year, project recruiters visited all mothers in the hospital who had given birth the day before. Families that did not speak English as a primary language, lived outside the six study counties (or were planning to move), or did not have custody of the target child were ineligible for participation. Mothers who resided in our target counties but delivered their babies in other counties were located through birth records. The overall coverage rate was over 90%, and the acceptance rate for those families who were eligible and selected to participate was 82%. The overall sample included 1,292 who had been visited in their homes several times a year over the children's first 3 years of life (a more detailed description of the recruitment process and sample can be found in Vernon-Feagans et al., 2008). Because of site differences, only African American families residing in North Carolina were used in the current investigation.

A total of 526 African American families (41% of the full sample) participated at the first data collection point when the target child

was 2 months of age. By the 24-month time point, 444 African American families consented to participate. Three male caregivers and 16 female caregivers who did not reside in North Carolina were deleted from the sample. The current study is based on 414 female caregivers who had complete data (11 missing) on the outcome measure of depression at the 24-month assessment. Of the participant families, nearly all of the female caregivers were biological mothers of the target child (98.3%). The remaining caregivers included 1 adoptive parent, 4 maternal grandmothers, 1 paternal aunt, and 1 cousin of the target child. As such, caregivers will be referred to as mothers in the remainder of this examination.

Procedure

Most of the data presented here were collected at the second of a series of 2.5-hr home visits, at the 24-month assessment time point. Two home visitors simultaneously collected a variety of data from the families, including interviews, questionnaires, and observational data on the mother, target child, and secondary caregiver (usually the biological father). All interviews and questionnaires in FLP were collected via laptop computers for confidentiality and ease of transmission of the data. At each assessment, new primary caregivers completed the KFAST literacy screener (Kaufman & Kaufman, 1994). Mothers reading at an eighth-grade reading level (or beyond) were given the opportunity to complete questionnaires on their own (86% sample), whereas those who read below an eighth-grade reading level had questionnaires read to them. All measures for the current study were assessed at the 24-month time point except church-based social support and previous levels of depression, which were assessed at the 6- and 15-month home visits, respectively. Written consent was obtained from the participants prior to our conducting homevisits.

Measures

Demographic data. At the 24-month home interview, detailed information was gathered on household composition, household income, and the education and jobs of household members. For this examination demographic data included the following variables: number of children in the household under age 5, maternal education,

marital status (married or single), employment status (yes or no), total number of work hours, and income-to-needs ratio.

Economic strain. The Economic Strain Questionnaire is a modified six-item index assessing the degree to which families are able to make ends meet ("can't make ends meet" index) and the degree to which there is enough money in the household for a home, clothing, food, and medical care ("not enough money" index). The questionnaire was adapted from part of Conger and Elder's (1994) larger construct of economic pressure developed for their study of economically distressed farm families in central Iowa. The two items from the "can't make ends meet" index were used in this analysis. Both items were rated on a 5-point scale. Respondents were asked, "How difficult is it for you to pay your family's bills each month?" (1 = *great deal of difficulty* to 5 = *no difficulty at all*) and "Generally at the end of each month you end up with . . ." (1 = *not enough to make ends meet* to 5 = *more than enough money left over*). Items were reverse coded prior to creating an average score ($\alpha = .76$).

Negative life events. The Life Events Checklist is a 49-item measure designed to assess presence of positive and negative events that have the potential to affect family functioning (Sarason, Johnson, & Siegel, 1978). Participants were asked to identify if various life changing events (e.g., "getting married," "you or someone close to you sent to jail," "death of someone close to you") had occurred in the past 6 months. Respondents rated whether an event was "good" or "bad." A sum of the number of life events rated as "bad" was used for this examination ($\alpha = .91$).

Perceived racial discrimination. The Experiences of Racism Scale is a 13-item measure designed to assess individuals' experiences of racism (Murry et al., 2001). Participants indicated how often they experienced racial discrimination (e.g., "How often has someone suspected you of doing something wrong just because you are African American?" "How often has someone yelled an insult or racial slur because you are African American?" "How often have members of your family been treated unfairly just because they are African American?"). Response options ranged from 1 (*never*) to 4 (*several times*) ($\alpha = .91$).

Optimism. The optimism questionnaire is a 12-item adaptation of the Life Orientation Test originally used by Carver and Scheier (1981). In this measure, items are rated on a 4-point Likert-type scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*) and include positive items such as "In uncertain times, you usually expect the best" and negative items such as "You rarely count on good things happening to you." All items loaded onto one common construct for optimism. Prior to scoring, negatively worded items were recoded. A mean optimism score was then computed ($\alpha = .71$).

Church-based social support. The Religious Social Support (RSS) questionnaire is a 21-item measure designed to assess social support in the context of religious involvement (Fiala, Bjorck, & Gorsuch, 2002). The RSS consisted of three, seven-item subscales representing support from a personal relationship with God ("God gives me the sense that I belong"), from one's religious congregation ("I can turn to others in my congregation for advice when I have problems"), and from one's clergy ("My church leaders care about my life and situations"). Each item is rated on a 5-point Likert response scale (from 1 = *strongly disagree* to 5 = *strongly agree*). If the question did not apply, individuals could respond by choosing a "not applicable" category ($\alpha = .90$). A recent study evaluated the psychometric properties of the RSS in the FLP data set (Willoughby, Cadigan, Burchinal, & Skinner, 2008). Results indicated a two-factor solution best represented the scale: God support and congregation/clergy support. Race did not moderate either the psychometric properties of the RSS or the relationship between social support and mental or physical health. In the current study, we created a mean score of the congregational and clergy factors (14 items) as a measure of church-based social support.

Depression. To account for previous levels of depression, the BSI-18 administered at the 15-month assessment was controlled for in this analysis. The BSI-18 is a short, highly sensitive, self-report screening index for psychological distress (Derogatis, 2000). The BSI-18 contains 18 items that are divided evenly across three dimensions: somatization, depression, and anxiety. Only the depression subscale ($\alpha = .83$) was chosen for this analysis given the access to a complementary outcome measure

at 24-month time point, the Center for Epidemiologic Studies Depression Scale (CES-D). The depression subscale (six items) assesses symptoms of dysphoric mood, anhedonia, disaffection, self-depreciation, hopelessness, and suicidal ideation. Using a 5-point scale (ranging from 0 = *not at all* to 4 = *extremely*), respondents were asked to indicate the degree to which particular problems had distressed or bothered them during the past 7 days.

The outcome variable of depression was assessed at the 24-month time point using the CES-D (Radloff, 1977). The CES-D consists of a single indicator of 16 items, which is widely used with community samples. The items were rated on a 4-point Likert-type scale indicating how often in the last week the individual experienced the various symptomatic events, ranging from 1 (*rarely or none of the time [less than 1 day]*) to 4 (*most or all of the time [5–7 days]*). Sample items included "I did not feel like eating; my appetite was poor," "I had trouble keeping my mind on what I was doing," and "I felt lonely" ($\alpha = .85$). Within this subsample, 28% of scores reached the clinical cutoff (16 or greater in patient populations; Radloff).

RESULTS

Descriptive Statistics

The sample was composed of 414 women who identified themselves as African American or Black. The participants had an average age of 27 years ($SD = 6.3$; range 17–66). Eighty-eight percent of women had at least two children under the age of 5 living in the household. Nearly 80% of the participants had completed a high school education or beyond. The average income-to-needs ratio was 1.15, suggesting the success in oversampling for poverty but also the reality of poor rural counties in North Carolina. Although over half (58.8%) of the women were employed, the vast majority lived in low-income households, with 50.3% of the participants reporting living at or below 100% of the poverty threshold and 87.1% living at or below 200% poverty. Most (65.7%) women in this sample were not currently married.

In order to examine the bivariate relationships between predictor and outcome variables, *t* tests were calculated for the dichotomous variables, and correlations were computed for the continuous variables. As expected, family

Table 1. Means, Standard Deviations, and Correlations Among Study Variables (N = 414)

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Depression at 24 months	—										
2. Income-to-needs ratio	-.12*	—									
3. Education level	-.17***	.49***	—								
4. Number of children under age 5	.06	-.18***	-.22***	—							
5. Depression at 15 months	.49***	-.18***	-.15**	.10*	—						
6. Total work hours per week	.00	.23***	.09	-.02	-.00	—					
7. Economic strain	.35***	-.21***	-.14**	.15**	.32***	-.03	—				
8. Negative life events	.28***	-.16***	-.11*	-.01	.20***	-.02	.21***	—			
9. Perceived racial discrimination	.19***	.19***	.10*	-.01	.12**	.02	.07	.08	—		
10. Optimism	-.44***	.12**	.18***	-.04	-.37***	-.08	-.31***	-.21***	-.07	—	
11. Church social support	-.18***	.07	.07	-.07	-.18***	-.08	-.20***	-.09	-.10*	.17***	—
Mean	12.8	1.15	12.24	1.59	52.78	37.04	2.58	3.42	20.06	2.81	4.31
SD	9.5	1.05	1.58	0.77	10.04	10.80	1.05	4.56	7.24	0.36	0.95

* $p < .05$; ** $p < .01$; *** $p < .001$.

income-to-needs ratio, maternal level of education, optimism, and religious social support were significantly and inversely associated with depression. A significant positive relationship existed between maternal depression and economic strain, previous level of depression, number of negative life events, and perceived racial discrimination. Analysis indicated that unmarried women were more depressed than married women ($t = 2.56$, $p = .01$). Finally, employed and unemployed women did not differ on depression scores ($t = -.45$, $p = .65$). Correlations, means, and standard deviations for all variables in the study are presented in Table 1.

Prior to conducting the regression analysis, all demographic control variables, variables that represented stress exposure, and the moderator variables were centered around their means. The means of the predictors were centered to be able to interpret the main effects and interaction effects (Aiken & West, 1991). In all models, dummy variables were coded for cases with missing values for predictor variables. This approach allowed for all participants with outcome variables to be included in the analyses (see NICHD Early Child Care Research Network & Duncan, 2003, for details). The dummy variable had a value of 1 if the predictor was missing and 0 otherwise. By assigning the mean value of the predictor to the individuals with missing data, coefficients were then estimated for each predictor using the data from individuals without missing data (this is analogous to full

information maximum likelihood in structural equation modeling).

*Buffering Effect of Optimism and
Church-Based Social Support in the
Relationship Between Perceived Racial
Discrimination and Depression*

Table 2 presents the results from the hierarchical regression analyses. Demographic control variables, previous depression, and maternal work characteristics were entered in Model 1 and predicted 25% of the variability in mothers' depression, $F(7, 406) = 20.19$, $p < .001$. Specifically, mothers with more education and who were employed were less depressed. Moreover, higher depression scores captured at the 15-month assessment were associated with higher scores on the 24-month depression outcome. An additional 6% of the variability in depression scores was accounted for with the addition of the number of negative life events and economic strain in Model 2, $\Delta R^2 F(2, 404) = 20.19$, $p < .001$. Mothers who perceived greater economic strain and who experienced more negative life events showed higher levels of depression.

Although adding maternal experiences of racial discrimination to the model only explained an additional 1% of variability (Model 3), the change was significant, $\Delta R^2 F(1, 403) = 8.06$, $p < .01$. More experiences of racial discrimination predicted greater levels of depression. Moreover, the addition of optimism and

Table 2. Summary of Hierarchical Regression Analysis for Variables Predicting Maternal Depression (N = 414)

Variable	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B
Income-to-needs ratio	-.15	.51	-.02	.50	.25	.50	.03	.50	-.03	.50	-.13	.49	-.01	.48	-.03
Level of education	-.72	.30	-.12	.29	-.66	.29	-.11	.29	-.70	.29	-.56	.28	-.09*	.28	-.09*
Marital status	-1.00	.95	-.05	.91	-1.00	.91	-.05	.90	-.77	.90	-.07	.89	-.00	.88	.01
Number of children in household under age 5	.02	.55	.00	.54	-.03	.54	-.00	.53	-.09	.53	-.08	.52	-.01	.51	-.01
Previous depression	.44	.04	.47***	.36	.36	.04	.39***	.35	.35	.04	.37***	.29	.30***	.26	.27***
Employment status	-2.25	.95	-.12	.92	-2.37	.92	-.12	.91	-2.35	.91	-2.21	.89	-.12*	.87	-.11*
Total work hours per week	.02	.05	.02	.05	.02	.05	.01	.05	.02	.05	-.00	.05	-.00	.05	-.01
Economic strain				.41	1.54	.41	.17***	.40	1.47	.40	.16***	.40	.12**	.39	.11**
Number of negative life events				.09	.39	.09	.19***	.09	.37	.09	.18***	.09	.15***	.33	.16***
Perceived racial discrimination								.06	.16	.06	.12**	.15	.11**	.14	.11**
Optimism												-6.04	1.19	-6.64	1.18
Church-based social support												.48	-.23***	.08	-.25***
Optimism × Perceived racial discrimination												.48	-.02	.48	.01
Church-based social support × Perceived racial discrimination												-.29		-.40	-.10**
R ²	.25			.31				.32				.36		.39	
F for change in R ²				20.19***				8.06**				13.28***		10.17***	

* $p < .05$; ** $p < .01$; *** $p < .001$.

church-based social support added 4% of variance to the model, $\Delta R^2 F(2, 400) = 13.28$, $p < .001$, with more optimism predicting less depression (Model 4). The effect of church-based social support was not a significant predictor on its own.

With respect to the hypothesis that optimism and church-based support would have a buffering effect on the link between perceived racial discrimination and maternal depression, demographic controls and the variables related to general social stress were entered into the model followed by the interaction terms. The interaction between perceived racial discrimination and optimism significantly predicted depression severity after taking into account the significant main effects for each variable. In addition, the interaction between perceived racial discrimination and church-based support also significantly predicted depression severity (Model 5). The two interaction terms added an additional 3% of the variance in predicting maternal depression, with the total model accounting for 39% of the variance in maternal depression.

To illustrate these two interaction terms, simple slopes at high (+1 *SD*) and low (−1 *SD*) values of optimism and church-based social support were plotted against depression severity and perceived racial discrimination (Figures 1 and 2, respectively). There was a positive association between racial discrimination and depression at low levels of optimism. At high levels of optimism, however, higher levels of racial discrimination did not predict depression severity. In other words, mothers were buffered from experiencing higher levels of depression, even under greater levels of perceived racial discrimination when they had an optimistic as opposed to pessimistic orientation about their future. Similarly, church-based support buffered mothers from higher levels of depression, even under the pressures of racial discrimination.

DISCUSSION

The purpose of this study was to examine the relationship between racial discrimination and maternal depression in a sample of mostly low-income, rural, African American mothers of young children, as well as to understand if there were health-promoting characteristics that might buffer these women from maternal depression. Using an ecological systems framework, we specified that that optimism and church-based

social support would buffer mothers from the psychological stress associated racism. Findings from this study showed that even after controlling for important demographic variables and previous depression, racial discrimination and its interaction with both optimism and church-based support added an impressive 7% of the variance in predicting maternal depression. Consistent with our hypothesis, we found that when rural African American mothers were also exposed to high levels of racial discrimination, those who were optimistic about the future and had support from the church community were much less likely to be depressed than those who were pessimistic and those who had less church-based social support. Thus, mothers may have been protected from negative mental health outcomes depending on how they coped with challenges and stressors in their lives.

In this study, having personal and social resources to deal with the stress associated with racial discrimination seemed to afford some protection for depression among African American mothers. We chose to focus on optimism as a dispositional style that may rouse the use of constructive coping strategies. Optimists are more likely to use active coping—planning, seeking instrumental support, using positive reinterpretation or strategies such as humor, acceptance, or religion—when stressors are perceived as less controllable (Peterson, 2000; Scheier & Carver, 1992). Similarly, religious participation may foster the use of active coping strategies that buffer individuals from the negative effects of discrimination on mental health. Participation in the church community has been consistently shown to function as a source of instrumental and emotional social support among African Americans (Bierman, 2006; Chatters, 2000; Mattis et al., 2003). Particularly in the rural South, where formal supports (i.e., mental health facilities) may be limited, church members and clergy within religious institutions provide access to an extended social support network for African Americans. Church attendance and involvement may provide opportunities for parishioners and church leaders to share personal experiences with racial discrimination and offer constructive guidance. Particularly in the African American church community, racial discrimination may be addressed directly in the liturgy and sermons through messages of forgiveness and divine retribution, allowing individuals to let go of anger or despair. Thus, in the rural South, the church

FIGURE 1. MODERATING EFFECT OF OPTIMISM IN THE RELATIONSHIP BETWEEN MATERNAL PERCEIVED RACIAL DISCRIMINATION AND DEPRESSION.

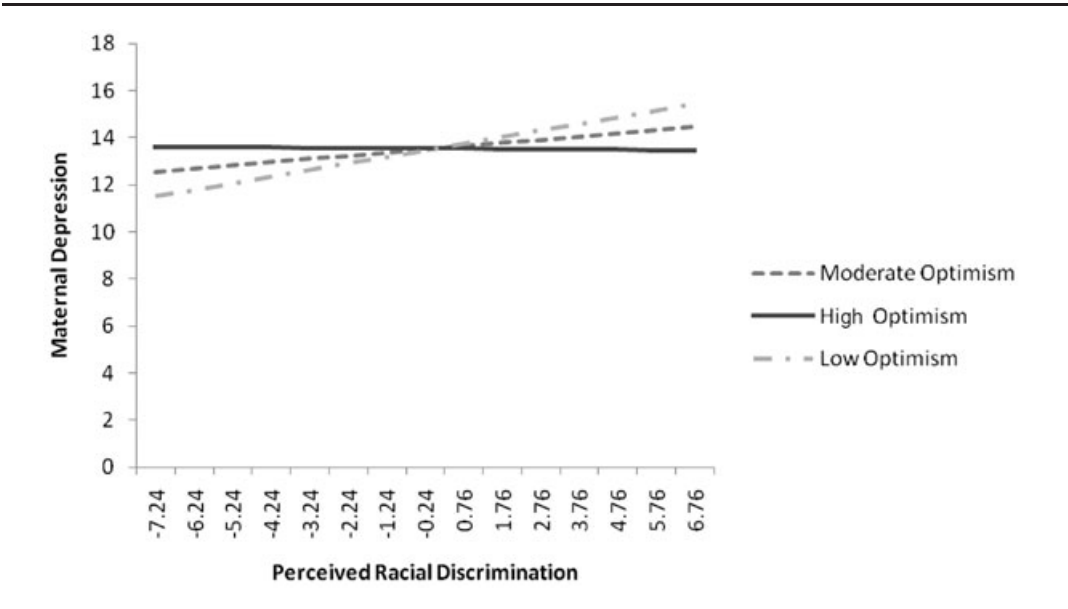
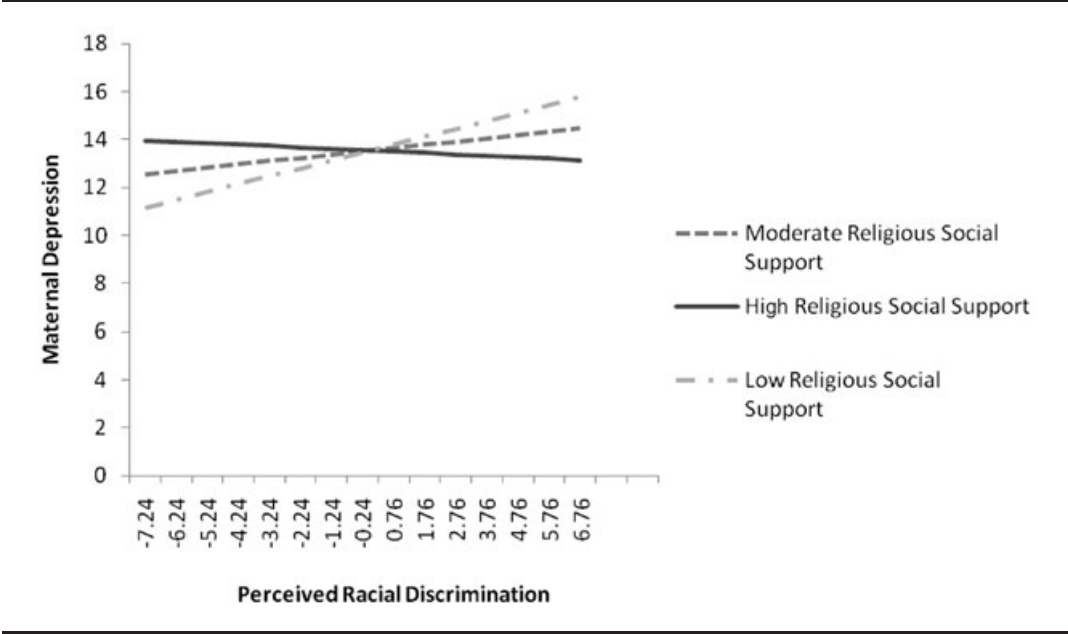


FIGURE 2. MODERATING EFFECT OF CHURCH-BASED SOCIAL SUPPORT IN THE RELATIONSHIP BETWEEN MATERNAL PERCEIVED RACIAL DISCRIMINATION AND DEPRESSION.



community effectively acts to fill gaps in formal support services, by providing individuals the opportunity to network and learn from others' experiences with racism (Stack, 1996).

Even though this study found that optimism and church-based social support buffered mothers from depression, the relatively high prevalence of depression among these mostly

low-income, rural African American mothers of young children in this study was concerning. Nearly a third of mothers in our sample reported levels of symptoms indicating possible depression (see similar findings in McLennan et al., 2001; Siefert et al., 2007). This number is particularly distressing because maternal depression has been linked to poorer parenting and child outcomes (Field et al., 2006; NICHD, 1999). Future researchers might identify other community or familial factors that could serve as buffers of depression for mothers living in rural environments. Rural African American mothers with young children may rely on close relationships with neighbors and strong marital or extended family ties when they are experiencing distress (see Black, Cook, Murry, & Cutrona, 2005), especially if child care is needed.

Racial discrimination has scarcely been studied as a risk factor for depression among low-income African American mothers. In the current study the direct effect of racial discrimination was relatively small, but this was after controlling for many of the demographic variables that have been associated with depression in previous studies. Moreover, it was quite notable that we were able to find effects of racial discrimination and the interaction terms even after accounting for mothers' depression 9 months prior to our outcome measure of depression. Although researchers continue to warn of risks of recurrent depression among women living in socioeconomically stressful environments, very few studies of maternal depression or individuals' experience with racial discrimination have accounted for depression within the previous year (Brown et al., 2000; Hammen, 2003b).

Although, this study provides some insight into factors that promote resilient adaptation among mothers in spite of racial discrimination, the findings must be considered within the context of several limitations. In the future it will be important to further understand the exact nature of mothers' experiences with racism and how these experiences impact their lives beyond depression, including physical health, relationship processes, and parenting of young children. Some evidence of the negative association between racial discrimination, psychological distress, and mother's parenting of adolescents has been reported in the research literature (see

Brody et al., 2008; Murry et al., 2001); however, these relationships have not been explored in mothers of preschool children. Second, the self-report measures of depression, optimism, church-based social support, and racial discrimination are likely to be confounded by shared method variance. Future studies may evaluate more objective, biologically based responses to racial discrimination to reduce this confound. It will be important to determine if the association between racial discrimination and depression is stable over time, as mothers face new parenting challenges when children reach school age. Finally, more research is needed to determine if discrimination is related to parenting competence in early childhood and whether it is subsequently related to child outcomes. Furthermore, it will be important to understand if buffers like optimism and church-based social support might protect mothers from poor parenting and poor child outcomes.

Knowing that optimism and church-based support may protect rural African American mothers from depression enables prevention scientists to begin to develop interventions that target coping skills that are specific to dealing with racial discrimination. Future research, however, should delineate coping skills that are most effective in confronting different types of racial barriers (e.g., interpersonal racism vs. racial barriers to employment, restrictive housing covenants, or differential access to services based on race). Moreover, further exploration is necessary to determine if experiences of racial discrimination among rural African Americans are distinctly different from racism experienced by urban African Americans and protective factors that are salient to locale.

In summary, this research contributes to the growing literature on the possible impact of stressful experiences on African American mothers of young children living in the rural South. Further, it establishes the importance of the exploration of racial discrimination and its association with maternal depression. Finally, this study identified optimism and church-based social support as buffers or coping mechanisms for women already at risk for depression because of multiple stressors. These mechanisms may be particularly important in helping to develop effective interventions for low-wealth African American mothers so they can better cope with the stresses of their daily lives.

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