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Linking Discrimination To Health: Does Coping Matter For The Mental Health Of Black Men And Women?

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LINKING DISCRIMINATION TO HEALTH: DOES COPING MATTER FOR THE
MENTAL HEALTH OF BLACK MEN AND WOMEN?

by

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ABSTRACT

Efforts to explain the negative association between discrimination and mental health have examined psychosocial responses to discrimination, such as coping responses or resources. However, there is limited research on how these coping strategies affect the discrimination-health relationship among Black Americans. Using data from the National Survey of American Life (NSAL), the present study examines the effect of perceived discrimination on depressive symptoms separately for men and women and tests the mediating and moderating influences of five coping strategies on this relationship. Results suggest that social support partially mediates the negative association between discrimination and mental health for men and women. Additionally, talking about one's feelings and prayer moderate (buffers) the discrimination-health relationship for men and women respectively. This study highlights the need for future research assessing both coping responses and resources in the coping process of Black Americans.

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CHAPTER 1

DISCRIMINATION, COPING, AND MENTAL HEALTH AMONG BLACK AMERICANS

INTRODUCTION

Research on the relationship between race and health suggests that Black Americans tend to fair worse than their White counterparts (Centers for Disease Control, 2013). Blacks report higher prevalence and severity of disease, including higher rates of diabetes, hypertension, and overall mortality rates than Whites in the United States (National Center for Health Statistics, 2012). Conversely, Blacks often fair better than (or equal to) Whites in terms of their mental health, including reports of major depression disorder and indicators of life satisfaction (Breslau et al., 2006; Riolo et al., 2005). Despite the discrepancy in reports of physical and mental health between Blacks and Whites, which some researchers have termed the “physical-mental health paradox,” scholars maintain that Blacks are at a disadvantage in regards to their mental health status due to the unique social experiences faced by Black Americans (Williams, 2012; Mays, Cochran & Barnes, 2007; Williams & Collins, 1995).

Research has repeatedly shown that experiences of perceived discrimination are negatively associated with various mental health outcomes among Blacks (see Williams, Neighbors & Jackson, 2003 for review). Reports of everyday discrimination, including incidents of acute racial bias and exposure to chronic racism, are positively associated with reports of non-specific distress, and lower reports of perceived happiness and life

satisfaction (Brown et al., 2000; Schulz et al., 2000; Williams et al., 1997). For Black Americans, perceived discrimination operates at individual and institutional levels and is often a persistent source of stress leading to these poor health outcomes (Williams, 2012). In addition, the association between perceived discrimination and mental health may be more severe among particular subgroups within the Black community, including differences by gender, socioeconomic status, ethnicity, and other social identities (Kessler, Mickelson & Williams, 1999).

Explanations for the discrimination-health relationship have examined coping responses to discrimination, such as behaviors, resources, and orientations, that may influence the ways in which discrimination is linked to poor mental health (Lewis-Coles & Constantine, 2006; Krieger, 1990). While a small body of work has identified specific coping strategies employed by Black Americans, there remains a limited understanding of: (a) how these coping strategies vary by gender within the Black community and (b) the effectiveness of coping strategies in explaining or mitigating poor mental health outcomes resulting from perceived discrimination. The purpose of this study is to examine the mediating and moderating effects of coping in the discrimination-health relationship among Black Americans. Using data from the National Survey of American Life (NSAL), the analysis specifically tests the effects of multiple coping responses and resources by gender in a nationally representative sample of Black Americans. By stratifying the analysis by gender, the project aims to expand past research on the coping strategies employed by Blacks (Brondolo et al., 2009; Pascoe & Smart Richman, 2009) and to better determine the link between discrimination, coping, and mental health for Black men and women.

1.1 THEORETICAL BACKGROUND

The discrimination-health relationship among Black Americans can be best understood through the stress process model developed by Pearlin (1989). According to the model, stress is defined by events that change an individual's role or self-concept, and leads to various, negative psychosocial responses that ultimately result in poor health outcomes (Pearlin, 1989; Pearlin et al., 1981). Key to the stress process model are the psycho-social resources that mediate or moderate the link between stress and health. These resources include behavioral, cognitive, and emotional responses aimed at reducing the effect of stress on health outcomes (Pearlin, 1989; Pearlin & Schooler, 1978).

Among Black Americans, discrimination is frequently reported as a stressful event defined by the stress process model (Williams, 2012; Mays et al., 2007; Clark et al., 1999). Specifically, experiences of discrimination are associated with lower self-esteem and self-mastery or control and are ultimately a predictor of poor mental health (Harris-Britt et al, 2007; Banks, Kohn-Wood, & Spencer, 2006; Sellers et al., 2003; Clark et al., 1999). In addition, Blacks can experience multiple forms of discrimination, including institutional, cultural, and individual discrimination and report varying degrees of these discrimination types throughout their life course (Williams, 2012; Brown et al., 2003; Kessler et al., 1999). Overall, the pervasiveness of discrimination within the lives of Black Americans has prompted research to focus on potential explanatory pathways linking discrimination to poor health outcomes (Pascoe & Smart Richman, 2009).

Specifically, research has begun to explore the psychosocial resources that may influence the association between discrimination and health. Largely, this research

defines psychosocial resources in terms of the coping process discussed by Lazarus (1984) and colleagues, and is defined as an individual's efforts to manage demands that are especially taxing or outside of the individual's own resources (Carver, Scheier, & Weintraub, 1989; Folkman et al., 1986; Pearlin & Schooler, 1978). Situational and individual factors work together in determining when, how, and to what extent individuals engage in coping responses (Compas et al., 2001; Thoits, 1995; Feagin, 1991; Folkman & Lazarus, 1980). Past coping research has broadly defined coping in three specific styles: problem-focused (or active) coping, emotion-focused coping, and avoidant (or passive) coping (Brondolo et al., 2009; Pascoe & Smart Richman, 2009). Although measured slightly differently throughout the literature, *problem-focused coping* generally refers to efforts that directly address the stressor, including attempts to resolve problems related to the stressor (Barnes & Lightsey, 2005; Clark & Adams, 2004). In contrast, *emotion-focused coping* refers to efforts that do not directly address the stressor, but rather focus on the emotions evoked by the stressor (Noh & Kaspar, 2003). Similarly, avoidant *coping* also refers to efforts that do not directly address the stressor, but instead involves complete avoidance of the problems and emotions related to the stressor (Barnes & Lightsey, 2005). While these broad categorizations of coping exist, it is important to note that there remains a lack of consensus on how to define and measure coping responses (Brondolo et al., 2009; Carver et al., 1989).

Research on the role of coping specifically within the discrimination-health relationship suggests that more direct efforts to address the stressor, including problem-focused coping strategies, are beneficial to health and well-being as these strategies are more likely to reduce negative feelings about one's self that result from discrimination

(see Pascoe & Smart Richman 2009 for review). For instance, Noh and Kasper (2003), in their study on Asian minorities, found that the use of personal confrontation, taking formal action, and talking to others, all examples of problem-focused coping, reduced the effect of perceived discrimination on depressive symptoms. In addition, past findings suggest that emotion-focused coping either intensifies or has no effect on poor mental health outcomes, while avoidant coping has been shown to have both buffering and exacerbating effects on mental health (Park, Armeli, & Tennen, 2004; Moghaddam et al., 2002; Utsey et al., 2000; Noh et al., 1999).

Because coping is a multidimensional process influenced by both situational and individual constraints, the extent to which these broad findings relate to specific social groups may vary (Perlin & Schooler, 1978). In fact, research on the role of coping among racial minorities highlights strategies unique to Black Americans. Often referred to as “africultural coping” (Utsey, Adams, & Bolden; 2000), these strategies include spiritual-centered and group-oriented coping, such as seeking guidance from religious congregations, as well as more general social support groups. Additionally, James (1994) suggests that Blacks engage in high-effort coping, including commitment to hard work and determination to succeed, which he terms “John Henryism.” These specific coping strategies are thought to be a direct result of both Black’s social position within the United States as well as a culturally-specific African worldview (Thomas, Witherspoon, & Speight, 2008; Utsey, Brown, & Bolden, 2004; Utsey, Adams, & Bolden, 2000).

The use and effectiveness of both africultural coping and John Henryism for reducing poor health outcomes in the face of discrimination is dependent on both the type of discrimination experienced, as well as individual factors (Thomas et al., 2008; Lewis-

Coles & Constantine, 2006; Utsey et al., 2004). For instance, Black women who experienced institutional racism and Black men who experienced cultural racism were more likely to engage in collective coping strategies consistent with afri-cultural coping (Lewis-Coles & Constantine, 2006). In addition, James (1994) found that Blacks who engaged in John Henryism reported higher levels of hypertension, however this association was only significant for Blacks of low socio-economic status. Given that John Henryism aligns best with problem-focused coping strategies, coping research suggests that engagement in high-effort coping should reduce poor health outcomes. Instead, James' opposing results adds to past mixed findings specifically addressing the role of coping in the discrimination-health relationship for Black Americans (Noh & Kasper, 2003; Utsey et al., 2000).

Finally, an important caveat to the above research on the effects of coping is the potential within-group differences among the Black community. Much of the research on stress and coping has focused on the different ways in which men and women respond to stressful experiences (Matud, 2004; Rosenfeld, 1999; Kessler et al., 1985). While the previous discussion highlights some gender differences, there remains a dearth of literature elucidating these findings beyond demographic trends (Barnes & Lightsey, 2005; Krieger & Sidney, 1996). Given that the moderating and mediating effects of coping among Black Americans is limited, literature on gender and coping may help provide a more thorough understanding of the effectiveness of specific coping strategies for Black men and women.

GENDER AND COPING

Within the literature on stress and gender, coping is considered a psychosocial explanation for gender differences in health outcomes (Read & Gorman, 2011). Briefly, studies suggest that men tend to adopt coping styles that work to either control the stressor (i.e., problem-focused coping) or that disengage from the stressor, while women engage in behaviors that rely on their social networks and express their feelings about the stressful experience (i.e., emotion-focused coping) (Rosenfield, 1999; Thoits, 1995). Arguing that problem-focused coping strategies are more beneficial for mental health outcomes, research suggests that gender-specific coping helps to explain why men tend to report lower rates of depression than women (Kessler et al., 1985; Folkman & Lazarus 1980). Additionally, gender-specific coping strategies may be more beneficial for particular types of stressors (Mattlin, Wethington, & Kessler, 1990; Pearlin & Schooler, 1978). That is, women may be more adept at dealing with relationship problems, while men may be more prepared to handle stressors resulting from work related experiences (Rosenfield, 1999). Overall, the distinction between gender-specific coping styles is largely attributed to differences in gender socialization, which defines emotions and behaviors considered appropriate for each gender within the United States (Rosenfield, 1999).

An important gender-specific coping strategy often studied alongside the discrimination-health relationship is the influence of perceived social support. Although not considered a coping response as defined by the coping literature, research argues that social support is a coping resource that is drawn upon during times of distress (Thoits, 2011; Taylor & Stanton, 2007). Here, social support refers to functions performed by

significant others that may meet an individual's emotional, informational, or instrumental needs (Thoits, 1995; Zimet et al., 1988; Cohen & Wills, 1985). Additionally, studies show that individuals who seek social support following discrimination report better mental health outcomes (Noh & Kasper, 2003; Smart Richman & Leary, 2008) and that this relationship is stronger for women than men (Denton et al., 2004; Dunkel-Schetter & Bennett, 1990). That is, women often report greater perceptions of social support than men and are more likely to engage in social support seeking after experiences of discrimination (Utsey et al., 2000; Thoits, 1995).

The utility of social support may be even greater for Black women and men. Again, research arguing that Blacks engage in aficultural coping suggests that Blacks are more likely to rely on collective coping styles that utilize their social support network (Buser, 2009; Snowden, 2001). Blacks are known to reach out to family, fictive kin, and religious networks in times of stress, with Black women being more likely to engage in these interpersonal coping strategies than men (Buser, 2009; Chatters et al., 2008; Taylor et al., 2001; Utsey et al., 2000). Despite this literature, studies have shown that Black Americans who report high levels of social support are not protected from the negative effects of discrimination compared to Blacks with low levels of support. That is, perceived discrimination has been associated with lower perceived levels of social support for Black Americans (Prelow, Mosher, & Bowman, 2006; Lincoln, Chatters, & Taylor, 2005). Feelings of social support may therefore erode as discrimination weakens one's sense of self (Prelow et al., 2006). These findings, however, are limited, and the role of social support within the discrimination-health relationship has been commonly disconnected from the literature on more direct coping responses. An analysis of both

coping resources, including social support, and responses would better address potential gender differences within the Black American coping process and help clarify past findings on the moderating and mediating effects of different coping strategies.

MODERATION

Research on the moderating effects of coping with discrimination has examined whether engagement in a particular type of coping attenuates the negative effects of discrimination on health for Black Americans (Clark & Adams, 2004; Krieger & Sidney, 1996). Results suggest that problem-focused coping protects against poor mental health (Pascoe & Smart Richman, 2009). For instance, Clark and Adams (2004) and Krieger and Sidney (1996) found that problem-focused coping response, defined by actively doing something about the situation and talking to people about the experience, decreased blood pressure rates among Black females experiencing discrimination compared to those who did not engage in a problem-focused strategy. In addition, problem-focused coping is positively associated with greater life satisfaction, while avoidant coping inversely predicts life satisfaction among Black college students (Barnes & Lightsey, 2005).

Conversely, Utsey and colleagues (2000) found that avoidant coping, as opposed to problem-focused strategies, protects against discrimination experiences and improves mental health outcomes among Black college students. Avoidant coping strategies were positively associated with higher self-esteem and life satisfaction (Utsey et al., 2000). Still, others have found no moderating effect of coping responses or resources on the relationship between discrimination and health, suggesting that the effect of discrimination on mental health is not attenuated by the use of psychosocial resources for Black Americans (Pascoe & Smart Richman, 2009).

MEDIATION

In comparison to the research on the moderating effects of coping, findings on the mediating effect of coping have been even more limited. Much of this research focuses on health-related coping behaviors in response to stress and discrimination, such as smoking, drinking, or physical activity (Martin, Tuch & Roman, 2003). Although this research may be beneficial in explaining the poor health of Black Americans, it ignores the multidimensional aspects of different coping styles, such as situational and individual factors contributing to how Blacks engage in the coping process. Other findings specific to research on social support present competing models to explain how coping resources mediate the negative association between stress and health (Barrera, 1988). For instance, the support mobilization model suggests that one's social support network mobilizes to support individuals in times of stress and leads to better health outcomes, whereas the support deterioration model suggests that social support decreases for individuals experiencing stress and leads to poorer health outcomes (Barrera, 1988, Prelow et al., 2006). Much of the research testing these two models has focused on various stress-inducing experiences, with two studies finding support for the stress deteriorating model in the face of discrimination (Kim, 2014; Prelow et al., 2006). While these results suggest that discriminatory experiences should lead to a decrease in perceived social support and thus negative health outcomes, limited attention has been paid to how social support operates alongside other coping responses.

Specifically, the extent to which coping responses mediate the relationship between discrimination and health depends on the appraisal of the discrimination experiences. Research on stress and coping defines appraisal as the process through

which individuals assess the importance of their stressful experience and decide whether or not to engage in a coping response (Folkman & Lazarus, 1986). Studies suggest that the way in which a stressful situation is appraised determines the type of coping an individual engages in, which ultimately explains health outcomes (Park et al., 2004; Vitaliano et al., 1990). In their study of university students, Park et al. (2004) found that individuals were more likely to engage in problem-focused coping when they believed they had some control over the stressful situation. Moreover, Folkman and Lazarus (1986) found that stressful situations appraised as threatening to one's self esteem were associated with more confrontational or problem-focused coping, as well as more avoidant coping strategies.

Within discrimination research, however, scholars argue that all discriminatory encounters are viewed as stressful and threatening to the self-concept or sense of control (Kessler et al., 1999; Outlaw, 1993). Thus, if a discrimination experience is already appraised as stressful, there may be other aspects of the discrimination experience that are more influential in predicting coping engagement (Outlaw, 1993). Specifically, the extent to which Black Americans experience discrimination can determine which coping strategy one employs. Previous findings show that events appraised as *individually* racist (i.e. discriminatory events happening to the self) or racially stressful have often been associated with less active coping efforts, and greater engagement in avoidance coping strategies as compared to events appraised as *collectively* racist (i.e. discriminatory events happening to the self and others) or non-stressful (Utsey et al., 2000; Plummer & Slane, 1996). To date, however, this research has focused on the type of discrimination experienced rather than the overall extent of the perceived discrimination. Specifically,

drawing from research on appraisal and coping, the extent to which Black Americans report discrimination may determine whether and how they respond to such experiences (Foster, 2009; Outlaw, 1993).

CHAPTER 2

THE PRESENT STUDY

The present study aims to advance research on coping and the discrimination-health relationship in three specific ways. First, the study aims to clarify past mixed results by determining whether different types of coping responses and coping resources moderate and/or mediate the discrimination-health relationship among Black Americans. Second, much of the past research neglects to address discrimination intensity as a factor in the link between discrimination, coping, and health. Thus, the present research categorizes discrimination into low, moderate, and high discriminatory experiences in an attempt to determine whether the extent of discrimination matters for coping style and subsequent health outcomes. Finally, the study assesses gender differences among Black Americans and theorizes their potential implications beyond demographic trends.

2.1 DATA AND METHODS

DATA

Data for this study is from the National Survey of American Life: Coping with Stress in the 21st Century (NSAL). Designed to examine racial and ethnic differences in mental disorders, psychological distress, and formal and informal service use, the NSAL has extensive measures on discrimination experiences and the social and physiological wellbeing of Black adults. Using a multi-stage probability sampling design, the NSAL sample was collected through a series of 6,082 face-to-face interviews. The interviews took place between 2001 and 2003 with an overall response rate of 72.3%. Although the

African American sample is the core sample, the NSAL also includes the first major probability sample of Caribbean Blacks ever conducted. More information on the NSAL, including a more detailed discussion on the survey design, is available in Jackson et al. (2004) and Heeringa et al. (2004).

Although the NSAL collects data from Non-Hispanic whites (N=890), these respondents are not included in the analysis, reducing the sample to 5,192 Black respondents. For the present study, the analytic sample also excludes all respondents who reported no or low levels of everyday discrimination, specifically those who responded never (0) or less than once a year (1) to all discrimination items (N=1,263). After exclusion of these respondents, the sample size is reduced to 3,929 respondents. Finally, after list wise deletion and weighting of the data, the final analytical sample size is 3,028 respondents (1,140 men; 1,888 women).

DEPENDENT VARIABLE

Depressive Symptoms. The 12-item Center for Epidemiological Studies Depression Scale (CES-D) was used to assess depressive symptoms (Radloff, 1977). Respondents were asked how often during the past week they (a) felt that they were just as good as other people; (b) had trouble keeping their mind on what they were doing; (c) felt depressed; (d) felt that everything was an effort; (e) felt hopeful about the future; (f) felt their sleep was restless; (g) were happy; (h) felt people were unfriendly; (i) enjoyed life; (j) had crying spells; (k) felt that people disliked them; and (l) felt they could not get “going”. Responses include 0=rarely or none of the time to 3=most or all of the time. Positive responses were reverse-coded and the 12 items were summed (range= 0-33; Chronbach’s alpha= 0.77).

KEY INDEPENDENT VARIABLES

Everyday Discrimination. Experiences of discrimination were assessed through a series of ten questions derived from the everyday discrimination scale (Williams et al., 1997). Respondents were asked, in their day-to-day life, how often any of the following things have happened to them: (a) treated with less courtesy than others; (b) treated with less respect than others; (c) received poorer service than others at restaurants or stores; (d) people acted as if they thought you were not smart; (e) people acted as if they were afraid of you; (f) people acted as if they thought you were dishonest; (g) people acted as if they were better than you; (h) you were called names or insulted; (i) you were threatened or harassed; and (j) you were followed around in stores. Responses ranged from 0=never to 5=almost every day and were reverse coded when necessary and combined (range= 0-60; Chronbach's alpha= 0.89). Responses were further categorized into three everyday discrimination categories: low (a score of 10 or less), moderate (a score of 11-20), and high (a score of 21 or more). This approach is adapted from past research categorizing the everyday discrimination scale to determine the prevalence of discriminatory experiences among minority populations (Lewis et al., 2013; Pérez, Fortuna, & Alegria, 2008; Mays & Cochran, 2001).

Responses to Discrimination. Responses to experiences of discrimination are assessed through a series of seven questions. Respondents were asked how they responded to their discrimination experiences, including had they: (a) tried to do something about it; (b) accepted it as a fact of life; (c) worked harder to prove them wrong; (d) realized that you brought it on yourself; (e) talked to someone about how you were feeling; (f) expressed anger or got mad; and (g) prayed about the situation.

Responses for each item include 1=yes and 0=no. In addition, respondents who did not experience discrimination were not asked questions regarding responses to discrimination and were excluded from the analysis.

Family Support. Adapted from Sarason (1983) and colleagues' social support questionnaire, respondents were asked how often their family (a) helps them out; (b) makes them feel loved and cared for; (c) listens to them talk about their private problems and concerns; (d) expresses interest and concern in their well-being; (e) makes too many demands of them; (f) criticizes them and the things they do; and (g) tries to take advantage of them. Responses ranged from 0=never to 3=very often and negative responses were reverse coded. In addition, respondents were asked how close they felt towards their family members. Responses ranged from 0=not close at all to 3=very close. All eight family support items were summed so that higher numbers indicate greater perceived family support (range=0-24, Chronbach's alpha = 0.71).

CONTROLS

Several covariates are included that may confound the association between depressive symptoms and the key independent variables. These factors include: age, ethnicity (Afro-Caribbean with African American as reference group), household income (\$12,001 to \$22,000, \$22,001 to \$35,000, \$35,001 to \$54,000, and more than \$54,001 with \$12,000 or less as the reference group), education (high school diploma, some college, and college degree or more with less than high school as the reference group), marital status (divorced/separated/widowed and never married with married as the reference group), and nativity (foreign born with U.S. born as the reference group). Self-reported physical health is also included as a covariate; respondents were asked how they

would rate their overall physical health at the present time. Responses were dummy coded so that 0=good, very good, or excellent physical health and 1=fair or poor health.

ANALYTIC APPROACH

Data analysis proceeded in several steps. First, to account for complex sampling design, all analyses were weighted using svy commands in Stata 14 statistical software. Second, the relationship between gender and all other variables in the model was assessed through a series of bivariate associations (Table 2.1). To examine the net effect of discrimination on depressive symptoms stratified by gender, a series of weighted least squares regression models were estimated using Stata 14. These results are present in Model 1 and Model 4 in Table 2.2. Model 2 and Model 5 presents the mediation analyses. In this model, coping strategies and resources were added to Model 1 and Model 4 and Sobel tests for mediation were performed. Finally, to determine whether coping responses and resources attenuate the effect of discrimination on mental health, Models 3 and 6 present the moderation analysis, which includes an interaction term between discrimination and coping strategies (i.e., discrimination x coping). All interaction terms were entered independently to Models 2 and 5. As recommended by Aiken and West (1991), variables were mean-centered to facilitate interpretation of main effects. For clarity, only significant interactions are presented, but results for all interaction terms are available upon request.

2.2 RESULTS

DESCRIPTIVE ANALYSIS

Table 2.1 presents sample characteristics stratified by gender. Black females report more depressive symptoms than their male counterparts (7.69 vs.6.59, $p<.05$). The

majority of men (52%) and women (53%) report a moderate amount of everyday discrimination, and chi-square tests of significance indicated that women report significantly more experiences of low discrimination (30% vs. 22%, $p < .05$) and significantly fewer experiences of high discrimination (17% vs. 25%, $p < .05$) compared to men. Across the four coping strategies, women are significantly more likely to talk about how they feel (52% vs. 46%, $p < .05$), pray about the situation (68% vs. 54%, $p < .05$), and express anger (47% vs. 39%, $p < .05$) than men; however, men are significantly more likely to respond to discrimination by realizing they brought it on themselves (7% vs. 3%, $p < .05$). Both men and women perceive a high amount of support from their family (17.38 and 17.35 for men and women respectively), but no significant difference by gender was found. Finally, the majority of men and women in the sample are of African American descent, born in the United States, have a high school diploma, are married or never married, and are in good health.

Ancillary analysis predicting depressive symptoms net of each discrimination response item revealed that not every discrimination response was significantly associated with depressive symptoms and that the inclusion of these non-significant coping strategies suppressed significant results. Thus, individual items that were not significant predictors of depressive symptoms were dropped from the present analysis. The presented analysis included four responses to discrimination: realized that you brought it on yourself, talked to someone about how you were feeling, expressed anger or got mad, and prayed about the situation.

Results from the multivariable regression models examining the effect of discrimination on depressive symptoms, as well as the mediating and moderating effect

of coping response on this relationship are presented in Table 2.2 (Models 1-3 for males and Models 4-6 for females). Beginning with the analysis of men, compared to experiences of low discrimination, high discrimination ($b=3.01$; $p<.001$) was positively associated with depressive symptoms net of additional factors, while moderate discrimination was unrelated to depressive symptoms (Model 1). Among females, experiences of moderate ($b=2.27$; $p<.001$) and high ($b=4.23$; $p<.001$) discrimination were positively associated with depressive symptoms compared to experiences of low discrimination, net of additional covariates (Model 4).

MEDIATION ANALYSES

Model 2 shows the results of the mediation analyses for men. The results suggest that prayer, family support and internalization (i.e., realizing you brought it on yourself) are significant predictors of depressive symptoms after adjusting for covariates. Prayer ($b=0.64$; $p<.05$) and realizing you brought it on yourself ($b=2.05$; $p<.001$) were both positively associated with reports of depressive symptoms, whereas family support ($b=-0.18$; $p<.001$) was negatively associated with depressive symptoms.

Overall, the addition of the five coping responses reduces the association between high discrimination and depressive symptoms for men by 20%, but remains significant. The association between moderate discrimination and depressive symptoms remained insignificant for males across Model 1 and 2. Tests for mediation, decomposing the total effect of coping on the association between high discrimination and depressive symptoms, indicated that the effect of high discrimination on depressive symptoms is partially mediated by family support ($z=2.37$; $p<.05$).

Turning to the results for women (Model 5), statistically significant coping responses include internalization and family support. More specifically, realizing you brought it on yourself was positively associated with depressive symptoms among Black women ($b=3.28$; $p<.001$), whereas family support was inversely related to depressive symptoms net of discrimination and covariates ($b=-0.25$; $p<.001$). The addition of the five coping responses in Model 5 reduces the association between moderate discrimination and depressive symptoms by 18.5% and reduces the association between high discrimination and depressive symptoms by 28.6% compared to low discrimination, but both relationships remain significant. Tests for mediation indicate the effect of moderate discrimination ($z=3.56$; $p<.001$) and high discrimination ($z=4.45$, $p<.001$) on depressive symptoms are partially mediated by family support.

MODERATION ANALYSES

The results of the moderation analyses are presented in Models 3 and 6. For men who report talking about how they are feeling after their discriminatory experience report lower levels of depressive symptoms in the face of moderate ($b=-3.78$; $p<.001$) and high levels of discrimination ($b=-3.26$; $p<.01$) on depressive symptoms. This relationship is illustrated in Figure 2.1a and while it looks like men who experience moderate discrimination report a drop in depressive symptoms if they talk about how they were feeling about the discriminatory event, the interpretation of the interaction coefficient reveals that talking about how they were feeling actually increases depressive symptoms among those with low discrimination and the effect of talking in response to moderate and high discrimination compared to not talking is quite small. The other four coping

indicators, did not significantly moderate the association between discrimination and depressive symptoms.

Among women, praying about the discriminatory event significantly the effect of moderate discrimination on depressive symptoms ($b=-1.24$; $p<.05$) among Black women, however the overall effect is quite small. Figure 2.1b illustrates this relationship and can be read in similar ways to Figure 2.1a. No other interactions between discrimination and coping were significant for Black women.

2.3 DISCUSSION AND CONCLUSION

Using data from the National Survey of American Life (NSAL), a nationally representative sample, the present study sought to obtain a better understanding of Black Americans' coping process in the face of discriminatory experiences. The analyses tested both the mediating and moderating effect of coping in the discrimination-health relationship in an effort to clarify previous mixed findings in coping research (Brondolo et al., 2009; Pascoe & Smart Richman, 2009; Clark & Adams, 2004; Utsey et al., 2000). Specific attention was given to anticipated gender differences among Blacks, by testing both coping responses and resources separately for men and women.

Overall, findings were consistent with previous literature that finds that women are more likely to report depressive symptoms than men, and that men and women differ in their response to discrimination (Read & Gorman, 2011; Kessler et al., 1999). The results suggest that Black men were more likely to engage in an internalized coping response, by realizing they brought it on themselves, while females were more likely to engage in emotion-focused coping (expressed anger or got mad) and religious guidance (Lewis-Coles & Constantine, 2006; Neighbors & Jackson, 1984). There was no

significant difference in perceived social support between men and women; however, both men and women reported relatively high levels of perceived family support.

As predicted, discrimination was positively associated with depressive symptoms for both men and women; however, the association between discrimination and depressive symptoms for men was only significant for reports of high discrimination. Additionally, for men, praying about the situation and realizing you brought it on yourself were positively associated with depressive symptoms, while perceived family support was inversely associated with mental health. The results were similar for females in that realizing you brought it on yourself was positively associated with depressive symptoms and perceived family support was inversely associated with depressive symptoms. These results lend support for the argument that emotion-focused coping responses (i.e., realizing you brought it on yourself) are negatively associated with mental health outcomes (Pascoe & Smart Richman, 2009). The result that praying about the situation was positively associated with depressive symptoms for men but not for women may be a consequence of men engaging in coping that is inconsistent with their appropriate gender norm. That is, while turning to religious guidance is a tenant of african cultural coping, this coping strategy is generally employed by women and more effective for women (Chatters et al., 2008; Ellison & Taylor, 1996). As a result, men who engage in this coping response may be at greater risk of exhibiting a negative association between prayer and mental health.

The results for the mediation analysis concluded that coping responses did not fully mediate the relationship between discrimination and mental health for men or women. Rather, a coping resource, perceived family support, partially mediated the effect

of high discrimination on mental health for men, and both moderate and high discrimination on mental health for women. Gender differences suggesting that women are more likely to seek social support than men may account for the partial mediation of both moderate and high discrimination for women compared to the partial mediation of high discrimination but not moderate discrimination for men. Overall, however, these findings suggest that Black Americans experiencing discrimination perceive less family support, which ultimately leads to worse mental health and is consistent with the stress deterioration model tested by Prelow (2006) and colleagues. In addition, this relationship appears to be contingent upon the extent of discrimination, as high discrimination was consistent in eroding social support across gender. While the present study is limited in its use of cross-sectional data, future research should examine whether these results hold upon examining longitudinal data. Specifically, it may be the case that the relationship between family support and discrimination is bidirectional and longitudinal data would be better able to address causality in this relationship.

For the results of the moderation analysis, praying weakened the relationship between moderate discrimination and depressive symptoms for women. This finding is consistent with past research on gender differences in coping suggesting that Black women are more likely to engage in religious coping strategies compared to Black men (Chatters et al., 2008). In addition, dealing with moderate discrimination directly through prayer supports the argument that problem-focused coping strategies are beneficial for health outcomes resulting from stressful experiences (Clark & Adams, 2004; Noh & Kasper, 2003; Kreiger & Sidney, 1996). However, it is important to note that the effect of praying about the situation in the present analysis is not very large. The small effect size

may be a result of the measurement of coping within the NSAL data. Specifically, while respondents are asked whether they pray about their discriminatory experience, we do not know the extent to which this prayer occurs and other intricacies of this coping response. Thus, the current coping measure of praying about the situation may not fully capture how prayer is used as a coping response to discrimination and could contribute to these small effect sizes.

The present analysis, however, does reveal that praying about the situation may be contingent upon the extent of discrimination as praying about the situation did not moderate the effect of high discrimination on mental health. For women, this result might suggest that experiences of high discrimination are too severe to be sufficiently handled through prayer. Additionally, it may be the case that coping strategies in response to high levels of discrimination may still be beneficial for well-being immediately following the discrimination experience, but simply do not extend to the subsequent mental health outcome included in this analysis (depressive symptoms measured within the past week). Whatever the case, future research should pay attention to the effectiveness of coping strategies for women experiencing different degrees of perceived discrimination.

The results for men are different, as talking with someone about their feelings following moderate and high levels of discrimination experiences attenuated the effect of these experiences on their mental health. While at first this result might seem to coincide with research suggesting men are more likely to engage in problem-focused coping and that this coping style protects against poor mental health outcomes in the face of discrimination, the interaction terms suggest that talking in response to moderate and high discrimination actually has a very small impact on depressive symptoms compared

to not talking. Interestingly, the effect of talking with someone their feelings actually has the greatest impact for those experiencing low discrimination. For these men, talking in response to low discrimination increases one's depressive symptoms, as illustrated in Figure 2.1A.

This finding suggests that Black men who rely on their interpersonal relationships to express their feelings, which is traditionally considered a female-specific strategy (Umberson et al., 2014; Rosenfeld, 1999), have worse mental health outcomes than men who do not engage in this coping strategy in response to low discrimination. In light of these findings, however, the wording of this coping response is particularly noteworthy. That is, past coping research has previously labeled talking about the discrimination experience as a problem-focused coping strategy (Noh & Kasper, 2003), however, the specific response of talking about how one is feeling has not been previously labeled in this way (Pascoe & Smart Richman, 2009). Thus, it would be interesting to know whether men are actually talking about their feelings, rather than simply talking about the discrimination experience, with this coping strategy. While over half of the men in the sample engaged in this coping response, the current measurement of this response makes it difficult to determine the extent to which men are truly talking about their feelings in response to discrimination. It may be that Black men consider this strategy to be problem-focused rather than emotion focused, and this appraisal may be done in an effort to stay consistent with gender norms. Qualitative research could better evaluate this nuanced relationship and would help determine whether the present findings highlight an effective coping strategy specific to Black men or are simply consistent with the prior literature.

Finally, it is also important to note that while talking about feelings and praying about the situation had significant impacts on the discrimination-health relationship for men and women respectively, all other coping resources did not significantly moderate the association between discrimination and depressive symptoms. These null findings add to research suggesting that coping does not buffer against racial discrimination among Black Americans (Pascoe & Smart Richman, 2009). These findings, however, should not deter future research from continuing to examine these coping strategies, as the limitations of the present study may provide insight into why certain coping responses did not mediate or moderate the discrimination-health relationship.

LIMITATIONS

There are several limitations to the above analysis that warrant consideration and point to potential areas of future research. First, the present study does not address engagement in multiple forms of coping that may influence the discrimination-health relationship. Past research shows that individuals often engage in multiple coping strategies that span across types of coping responses (Branscombe & Ellemers, 1998; Thoits, 1995). Given that problem-focused, emotion-focused and avoidant strategies may have opposing effects on the discrimination-health relationship (Barnes & Lightsey, 2005; Utsey et al., 2000), it may be the case that engagement in two or more of these styles would diminish individual relationships between a particular coping response, discrimination, and mental health. While the present study is novel in that it incorporates both coping responses and resources into understanding the discrimination-mental health relationship, an analysis of the effects of multiple coping responses is not addressed. Thus, future research should focus on how individuals engage across coping strategies,

particularly within nationally representative samples, and its absence in the present study should be considered when interpreting results.

Second, the everyday discrimination and 12-item CES-D depressive symptoms scales contain individual items that may underlie similar feelings towards interpersonal relationships. Particularly, the CES-D scale contains the items “I felt like people disliked me,” and “I felt that people were unfriendly,” which are similar to the items “I was treated with less respect than others,” “I was called names or insulted,” and other items pertaining to discrimination. In fact, a body of literature suggests that both the everyday discrimination scale and CES-D measure may be racially biased and insufficient for analyses on racial minorities, including Black Americans (Perreira et al., 2005; Cole et al., 2000). While ancillary analysis shows that the individual items of these two measures were not highly correlated within the NSAL sample (see Appendix A), a consideration of the relationship between the items on these two scales is important. A thorough examination of the relationship between these scales is outside the scope of this study, however acknowledging the association between these two constructs is important for research on the discrimination-mental health relationship.

Finally, research on stress and coping has previously examined personality factors that may confound the relationship between stress, coping and health. Specifically, this research has focused on an individual’s sense of control or mastery, and findings have shown that an individual’s greater sense of mastery attenuates the relationship between stress and mental health (Keith et al., 2010). Moreover, given that these personality measures have been known to differ by gender and race, with women and racial minorities more likely to report lower levels of self-mastery, the exclusion of this factor

from the present study is noteworthy (Jang et al., 2003; Nolan-Hoeksema, Larson, & Grayson, 1999). Future research should include these measures for a more thorough understanding of the relationship between coping, discrimination and health.

CONCLUSION

While the present findings highlight the need for further research on the Black American coping process, the mediation and moderation analyses contribute to the current state of the literature. That is, the mediation analysis provides support for the stress-deteriorating model among Black Americans, and appears to be contingent upon the extent of discrimination experienced, particularly among men. In addition, the moderation analysis provides support for past research suggesting that more problem-focused coping strategies buffer the relationship between discrimination and health. Gender differences in both the mediation and moderation analysis suggest that Black men and women differ in their coping strategies. Specifically, it appears that Black men may benefit from coping strategies traditionally employed by females, a finding that warrants future study. Finally, by assessing both coping responses and resources, the present study draws upon scholarship on both social support and coping that is often separate from one another. While the results do show that social support (a mediating effect) and coping responses (moderating effects) operate differently within the coping process, the inclusion of both coping strategies more thoroughly addresses the link between discrimination, coping, and health. Future research should continue this trend and use both quantitative and qualitative methods for a more complete understanding of the Black American coping process.

Table 2.1: Sample Characteristics of Black Americans by Gender, Weighted Data, NSAL, 2001-2003, N=3,028

		Males N= 1,140	Females N= 1,888	Total N= 3,028
	Range	Mean (SE) or %	Mean (SE) or %	Mean (SE) or %
<i>Dependent Variable</i>				
Depressive symptoms	0-33	6.59 (0.21)	7.69 (0.24)*	7.19 (0.20)
<i>Key Independent Variables</i>				
Everyday discrimination				
Low discrimination	0-1	22%	30%*	26%
Moderate discrimination	0-1	52%	53%	53%
High discrimination	0-1	25%	17%*	21%
Discrimination responses				
Talked about how you were feeling	0-1	46%	52%*	49%
Prayed about the situation	0-1	54%	68%*	62%
Realized you brought it on yourself	0-1	7%	3%*	5%
Expressed anger or got mad	0-1	39%	47%*	43%
Family support	0-24	17.38 (0.16)	17.35 (0.16)	17.36 (0.13)
<i>Covariates</i>				
Age	18-90	39.38 (0.67)	39.51 (0.64)	39.45 (0.50)
Ethnicity				
African American	0-1	93%	95%	94%
Afro-Caribbean	0-1	7%	5%	6%
Education				
Less than high school	0-1	21%	22%	21%
High school diploma	0-1	39%	34%	36%
Some college	0-1	25%	27%	26%
College degree or more	0-1	16%	17%	16%
Household income				
\$12,000 or less	0-1	14%	24%*	19%
\$12,001 - \$22,000	0-1	13%	20%*	17%
\$22,001 - \$35,000	0-1	22%	20%	21%
\$35,001 - \$54,000	0-1	22%	17%*	19%
\$54,001 or more	0-1	28%	20%*	24%
Marital status				
Married	0-1	49%	37%*	43%
Never married	0-1	33%	35%	34%
Other	0-1	18%	28%*	23%
Nativity				
Foreign born	0-1	7%	4%*	6%
Self-reported physical health				
Fair or poor	0-1	16%	21%*	19%

*significantly different at p<.05 level, two-tailed test

Table 2.2: OLS Regression Models Predicting Depressive Symptoms of Black Americans by Gender, Weighted Data, NSAL 2001-2003, N=3,028

	Males (N= 1,140)			Females (N=1,888)		
	Model 1 β (SE)	Model 2 β (SE)	Model 3 β (SE)	Model 4 β (SE)	Model 5 β (SE)	Model 6 β (SE)
Everyday discrimination						
Moderate discrimination	0.56 (0.34)	0.38 (0.34)	1.80 (0.44)***	2.27 (0.39)***	1.85 (0.35)***	2.69 (0.49)***
High discrimination	3.01 (0.57)***	2.41 (0.55)***	3.59 (0.74)***	4.23 (0.56)***	3.20 (0.59)***	3.31 (0.86)***
Coping strategies						
Talked about how you were feeling		0.51 (0.34)	3.39 (0.77)***		0.43 (0.37)	0.44 (0.37)
Prayed about the situation		0.64 (0.29)*	0.66 (0.28)+		0.21 (0.37)	0.90 (0.57)
Realized you brought it on yourself		2.05 (0.52)***	1.95 (0.56)***		3.28 (0.90)***	3.25 (0.88)***
Expressed anger or got mad		0.28 (0.38)	0.35 (0.39)		0.46 (0.32)	0.46 (0.32)
Family support		-0.18 (0.05)***	-0.16 (0.04)***		-0.25 (0.04)***	-0.25 (0.04)***
<i>Covariates</i>						
Age	-0.03 (0.02)+	-0.03 (0.02)*	-0.03 (0.02)+	-0.07 (0.01)***	-0.07 (0.01)***	-0.07 (0.01)***
Afro-Caribbean	1.01 (0.99)	0.99 (0.96)	1.25 (0.95)	-2.00 (0.35)***	-1.55 (0.39)***	-1.56 (0.38)***
High school diploma	-0.94 (0.57)	-0.96 (0.54)+	-0.70 (0.55)	-1.44 (0.58)*	-1.16 (0.56)*	-1.17 (0.57)*
Some college	-2.50 (0.59)***	-2.43 (0.59)***	-2.26 (0.58)***	-3.30 (0.61)***	-3.15 (0.58)***	-3.18 (0.58)***
College degree or more	-2.05 (0.67)**	-2.10 (0.67)**	-2.05 (0.68)**	-3.43 (0.69)***	-3.26 (0.68)***	-3.29 (0.68)***
\$12,001 - \$22,000	-0.97 (0.86)	-0.92 (0.81)	-0.77 (0.78)	-0.59 (0.53)	-0.87 (0.50)+	-0.90 (0.51)+
\$22,001 - \$35,000	-0.39 (0.52)	-0.15 (0.51)	-0.02 (0.49)	-1.44 (0.65)*	-1.37 (0.63)*	-1.40 (0.63)*
\$35,001 - \$54,000	-0.96 (0.66)	-0.68 (0.64)	-0.57 (0.60)	-1.82 (0.58)**	-1.87 (0.57)**	-1.91 (0.57)**
\$54,001 or more	-1.19 (0.73)	-0.85 (0.72)	-0.71 (0.68)	-2.47 (0.58)***	-2.49 (0.58)***	-2.56 (0.59)***
Never married	-0.01 (0.55)	0.30 (0.55)	0.34 (0.53)	-0.69 (0.40)+	-0.63 (0.40)	-0.62 (0.40)
Other	0.16 (0.51)	0.37 (0.47)	0.51 (0.47)	-0.27 (0.51)	-0.25 (0.53)	-0.23 (0.54)
Foreign born	0.11 (0.75)	-0.00 (0.73)	-0.28 (0.74)	1.26 (0.73)+	0.94 (0.70)	0.95 (0.69)
Fair or poor physical health	2.85 (0.50)***	2.66 (0.50)***	2.61 (0.48)***	3.06 (0.39)***	2.67 (0.40)***	2.65 (0.40)***
<i>Interactions</i>						
Moderate discrimination x Talked about it			-3.78 (0.87)***			
High discrimination x Talked about it			-3.26 (1.28)**			

Moderate discrimination x Prayed about it							-1.24 (0.59)*
High discrimination x Prayed about it							-0.20 (1.02)
Constant	8.31	10.55	4.57	11.57	15.37		5.55
R ²	0.18	0.22	0.24	0.25	0.29		0.29

+p<.10; *p<.05; **p<.01; ***p<.001

References: Low discrimination, African American, Less than high school degree, Less than \$12,000, Married, U.S. born, Good/Very good/Excellent health

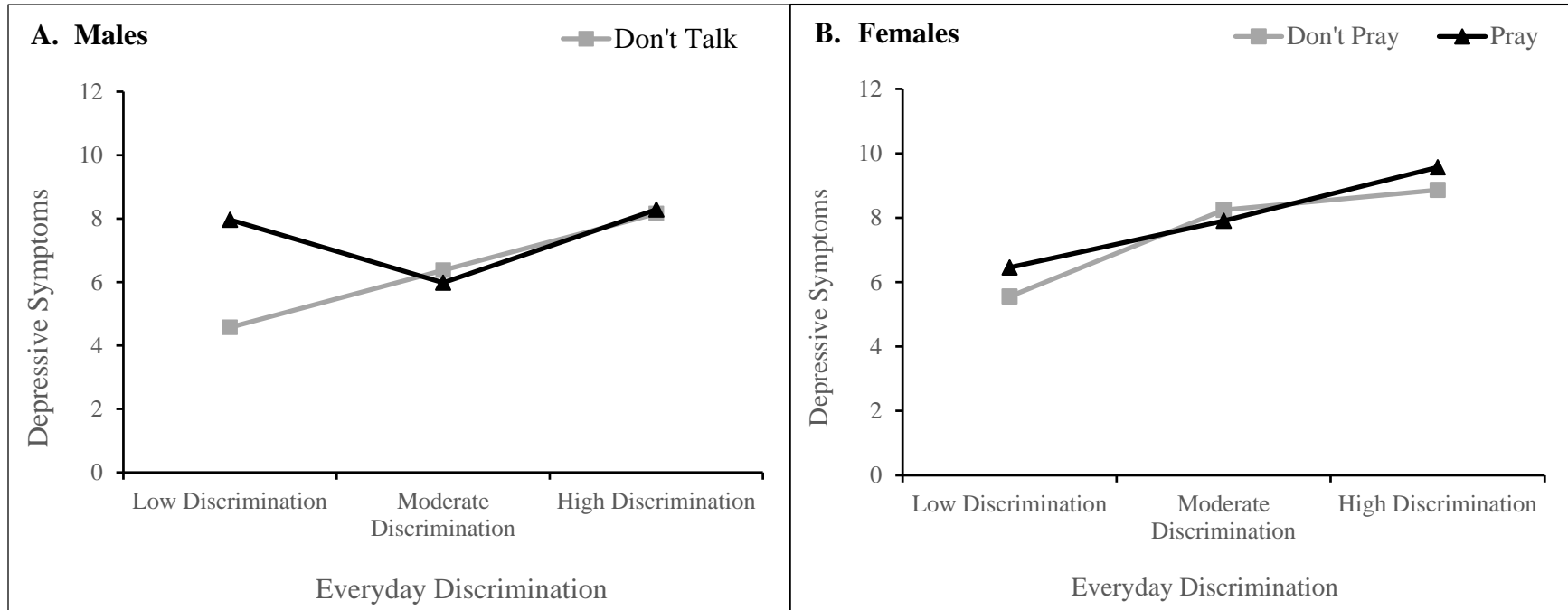


Figure 2.1: The Effect of Coping and Perceived Discrimination on Depressive Symptoms for Black Males and Females, Weighted Data, NSAL 2001-2003, N=3,028

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APPENDIX A – ITEM CORRELATIONS BETWEEN THE EVERYDAY DISCRIMINATION SCALE AND 12-ITEM CENTER FOR EPIDEMIOLOGICAL STUDIES DEPRESSION SCALE AMONG BLACK AMERICANS, WEIGHTED DATA, NSAL, N=3,028

	Everyday Discrimination Scale									
	Treated with less courtesy than others	Treated with less respect than others	Received poorer service in restaurants or stores	People acted as if you were not smart	People acted as if they were afraid of you	People acted as if you were dishonest	People acted as if they were better than you	You were called names or insulted	You were threatened and/or harassed	You were followed around in stores
12-item CES-D Scale										
Felt just as good as others	0.09***	0.08***	0.04*	0.07***	0.05**	0.07***	0.08***	0.09***	0.06***	0.03
Trouble keeping mind on things	0.08***	0.10***	0.10***	0.14***	0.07***	0.12***	0.13***	0.12***	0.13***	0.07***
Felt everything was an effort	0.04	0.01*	0.04	0.09***	0.06	0.06***	0.12***	0.12***	0.08***	0.01
Felt hopeful about the future	0.04*	0.08***	0.04*	0.05***	0.03	0.07***	0.05**	0.07**	0.06***	0.01
Felt sleep was restless	0.09***	0.08***	0.10***	0.12***	0.06***	0.10***	0.11***	0.12***	0.11***	0.04*
Was happy	0.09***	0.11***	0.06***	0.12***	0.09***	0.11***	0.13***	0.15***	0.16***	0.04*
Felt people were unfriendly	0.16***	0.17***	0.10***	0.17***	0.10***	0.13***	0.19***	0.21***	0.12***	0.04*
Enjoyed life	0.08***	0.09***	0.06***	0.06***	0.07***	0.07***	0.08***	0.10***	0.10***	0.02
Had crying spells	0.06**	0.08***	0.06**	0.11***	0.04	0.06***	0.12***	0.16***	0.10***	0.00
Felt people disliked you	0.15***	0.15***	0.11***	0.24***	0.14***	0.20***	0.23***	0.25***	0.16***	0.07***
Felt you could not get going	0.06**	0.08***	0.03	0.14***	0.06***	0.08***	0.13***	0.12***	0.10***	0.03

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