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Associations Between Social Relationships and Emotional Well-Being in Middle-Aged and Older African Americans

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Abstract

Social relationships may enhance emotional health in older age. The authors examined associations between social relationships and emotional health using data from the Milwaukee African American sample of the second Midlife Development in the United States (MIDUS II) study, 2005-2006 (n = 592). Self-reports indicated good, very good, or excellent emotional health, distinguished from fair or poor. Social relationships were measured by relationship type (family or friend), contact frequency, and levels of emotional support and strain. Control variables included demographic characteristics, types of lifetime and daily discrimination, neighborhood quality, and other social factors. In adjusted results, each increase on a family emotional support scale was associated with 118% greater odds of reporting better emotional health (odds ratio [OR] = 2.18, 95% confidence interval [CI] [1.43, 3.32]). Friend emotional support also was associated with better emotional health (OR = 1.59, CI [1.07, 2.34]). Daily discrimination substantially reduced reported emotional health; family and friend support buffered this effect.

Keywords

African Americans, discrimination, emotional health, emotional support, family ties, social relationships, social support, social ties

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Social relationships, or social ties, can be characterized by the type of relationship, such as relationships with family, friends, or colleagues. They can also be characterized by interactions in a relationship, such as their frequency, quality, and context, which can help determine the meaningfulness of the relationship. Social relationships are associated with physical health (Berkman, Glass, Brissette, & Seeman, 2000; Berkman & Syme, 1979; Kawachi & Berkman, 2001). A growing number of studies have suggested that social relationships are also associated with emotional health, particularly depression and depressive symptoms (Blazer, 2008; E. Y. Cornwell & Waite, 2009; George, Blazer, Hughes, & Fowler, 1989; Kawachi & Berkman, 2001; Seeman, 2000).

Effects of social relationships are often studied by examining the association between the number of individuals' relationships and their health (B. Cornwell, Laumann, & Schumm, 2008; Berkman et al., 2000; Cohen, Gottlieb, & Underwood, 2000). Social isolation, having few or no social ties, has long been associated with greater risks of morbidity and mortality (Berkman & Syme, 1979; Durkheim, 1897/1951). Studies have also associated the frequency of social interactions with health (B. Cornwell et al., 2008; Troxel et al., 2010). Among older adults, increasing age is related to shrinking social networks, fewer interactions, and reduced quality of ties (B. Cornwell et al., 2008). The number of ties and level of social interaction are also potentially related to living situations, with those living in extended family households, such as many African Americans, having more ties and more opportunities for interaction (Peek & O'Neill, 2001). A limitation of studies focused on these issues is that they may miss important associations between relationships and health if the relationships are measured only by their number or contact frequency. The quality of relationships, including levels of support or strain, may also affect health and well-being (Dupertuis, Aldwin, & Bosse, 2001; Ryan & Willits, 2007; Seeman, 2000; Walen & Lachman, 2000).

Much of the research on social relationships focuses on the health of older adults. Relatively few studies have examined this issue in adults at middle age or among the younger-old. Adults in these groups are of increasing interest to gerontologists because they provide useful opportunities for interventions to promote health in later life. For example, the Healthy Aging Program at the Centers for Disease Control and Prevention and the National Association of Chronic Disease Directors (2008) define older adults as those ages 50 and older, both for the purpose of general health promotion and specifically for promoting emotional health through social support.

In the United States, the existing literature on social ties focuses principally on non-Hispanic Whites (hereafter Whites), with fewer studies including or focusing on African Americans. In contrast to social networks among Whites,

networks among African Americans often include extended family, both kin and non-kin. Ties with family other than spouses and ties with friends may be particularly important for African Americans, as they are less likely to be married than Whites, marry later in life, and have shorter marriages (Dixon, 2009). Many African American families enjoy a high level of interdependence and resource sharing across generations (Ajrouch, Antonucci, & Janevic, 2001; Jarrett & Burton, 1999; Jett, 2002; Kane, 2000; Porter, Ganong, & Armer, 2000). However, interdependence can also create physical, emotional, and financial burdens, as family members may often expect help in exchange. For example, older African American women who receive instrumental support also commonly provide care for other relatives and small children even though they themselves may be in poor health (Minkler & Fuller-Thomson, 2005; Warren-Findlow, 2006). Particularly for African Americans without family members living nearby, or for those who have strained family relationships, friends and other community members may be elevated to kin status (Porter et al., 2000). Reciprocity of help with instrumental needs may be common among many African Americans regardless of available resources or the types of their relationships (Fiori, Consedine, & Magai, 2008; Porter et al., 2000).

African Americans also have more chronic illness than Whites. Chronic illness is often associated with depression. Thus, the excess burden of chronic illness may also contribute to greater depression among African Americans (Mills & Edwards, 2002; Warren-Findlow, 2006), underscoring the value of better understanding how social relationships may support emotional health. Health disparities related to relatively high chronic disease prevalence, early age of onset, and greater disease severity suggest that many African Americans may experience accelerated physiological aging (Geronimus, Bound, Waidmann, Colen, & Steffick, 2001; Warren-Findlow, 2006). Accelerated aging may promote needs for social support, increasing contacts with family or friends, and potentially affecting relationship quality. Thus, the possibility of accelerated aging highlights the usefulness of better understanding associations between social relationships and emotional health among African Americans at midlife and at younger-old ages and of identifying whether positive social relationships may help to maintain emotional health.

Conceptual Framework. Our study was informed by the work of Berkman et al. (2000), who suggest that the influence of social networks on health occurs within a social-structural context. Social networks consist of the web of relationships and the contacts and contents that describe it. Social relationships are formed in the context of cultural, economic, political, and social influences such as neighborhood quality and experiences of discrimination. These

relationships in turn influence an individual's level of social engagement and social influence, including individual characteristics such as work and volunteering, which affect health through behaviors, psychological mechanisms, or biological pathways. We used these conceptual categories to determine our variable selection and organize our analyses.

Study Objectives and Contributions. We examined associations between social ties and the self-rated emotional health of African Americans. Specifically, we examined associations among the type, frequency, and quality of social ties and self-rated emotional health and included other factors that may influence the health of African Americans. Our expectation, based on limited previous research (Dupertuis et al., 2001; Ryan & Willits, 2007; Walen & Lachman, 2000), was that the quality of friend or family ties, more so than the frequency of contacts, would be associated with self-rated emotional health. Based on considerable evidence suggesting that discrimination may negatively affect the health of African Americans (Barnes et al., 2008; Schulz et al., 2006; Williams, Yan, Jackson, & Anderson, 1997), we hypothesized that reported discrimination would be negatively associated with self-rated emotional health and that positive social ties would reduce this negative effect. A better understanding of associations between the type and quality of social ties and emotional health is useful for identifying populations that might benefit from efforts of medical and mental health care services, and of social services, to address health disparities affecting African Americans. This better understanding may also help to inform the development of public health interventions to improve emotional health.

Background

Emotional health is a multifaceted concept containing both positive and negative characteristics (Hendrie et al., 2006). Emotional health encompasses negative aspects such as stress, depression, or the presence of mental health disorders and symptoms and positive aspects such as quality of life (Bloor, Sandler, Martin, Uchino, & Kinney, 2006), resilience (Smith, 2009), general well-being, and life satisfaction (Jang, Chiriboga, Borenstein, Small, & Mortimer, 2009).

Research on the emotional health of African Americans has yielded mixed findings. One study found that African Americans reported less lifetime depression than either Caribbean Blacks or Whites, but that African Americans with depression were more likely than others to say that it affects them chronically and with greater severity (Williams et al., 2007). Another study reported

that older African Americans had 60% more depressive symptoms than Whites, although the difference declined to about 30% when adjusted for income and education (Skarupski et al., 2005). Primary care physicians are less likely to diagnose existing depression for African Americans than for Whites and less likely to act on emotional distress communicated by African American patients (Ghods et al., 2008). African Americans with depressive symptoms also are less likely to discuss emotional or mental health problems with physicians or other health care and helping professionals, such as nurses, social workers, or clergy (Probst, Laditka, Moore, Harun, & Powell, 2007). Reluctance among African Americans to report symptoms of depression to a health care or other helping provider may be due to perceptions of stigma associated with mental illness (Roberts et al., 2008). These findings underscore the need for health and human services providers to ask African Americans about emotional as well as physical well-being.

Depression affects the well-being of many older persons. Its effects may be particularly great among older African Americans. Older African Americans report lower health-related quality of life than Whites (Hu, 2007; Jang et al., 2009; Skarupski et al., 2007). In some cases, differences in health-related quality of life between older African Americans and Whites may be explained by differences in socioeconomic status, physical health, or cognitive health (Skarupski et al., 2007). Declines in health-related quality of life among African Americans at midlife may be related to existing and incident physical health problems (e.g., cancer, diabetes, and lung diseases) and existing depression (Wolinsky et al., 2009). Stress has also been associated with poorer health among African American women of all ages (Young et al., 2004).

Social relationships may influence health through social support (Cohen & Wills, 1985; Kawachi & Berkman, 2001), which in turn may buffer stress (Cohen & Wills, 1985). Perceptions of caring and strain in a relationship are indications of relationship quality. Caring can take the form of instrumental support (helping with or doing a task for someone, such as providing transportation or going shopping) or emotional support (spending time with someone, listening, and caring) (Berkman & Glass, 2000). Characteristics of emotional support related to relationship quality that might contribute to better emotional health include intimacy, empathy, understanding, and connectedness (Berkman et al., 2000). In one study of African American adults in the South, ranging in age from 17 to 65 and older, perceptions of greater support from extended kin were significantly related to fewer depressive symptoms (Dressler, 1985), with men gaining more benefits from family support than women. Better quality family relationships aside from relationships with spouses, as measured by perceptions of emotional support, have been associated with better mental

health in young and middle-aged adults (Bertera, 2005). In the same sample, however, having positive relationships with friends was not associated with better health. Similarly, Bloor and colleagues (2006) found that emotional support from family and friends was not associated with better mental health among predominantly middle-aged and older African Americans with less education.

Social relationships, although acknowledged as an important contributor to health, are not always emotionally supportive (Dupertuis et al., 2001; Ryan & Willits, 2007). For example, African Americans are more likely to report negative effects of marriage than Whites (Mills & Edwards, 2002). Another study suggests, however, that African Americans may judge their relationships with family and friends to be more emotionally supportive than not (Lincoln, Taylor, & Chatters, 2003).

Acute strain occurs in most relationships and may be temporary or may develop for an extended period following a family crisis, a financial or health crisis, or other stressful situation. These transient types of strain can be distinguished from chronic strain that may be a long-lasting and central characteristic of the relationship itself (Lincoln, Chatters, & Taylor, 2005; Lincoln, Chatters, Taylor, & Jackson, 2007; Lincoln et al., 2003). Temporary or situational strains are sometimes called negative interactions. Research examining their role in health has found inconsistent results. Okun and Keith (1998) found that both positive and negative interactions were significantly inversely related to depressive symptoms in younger and older adults. However, in another study, negative interactions were not associated with depressive symptoms in a young and middle-aged sample of African Americans (Lincoln et al., 2005). Additional research is needed to clarify associations for African Americans between relationship support and strain on one hand and emotional health on the other.

Social structural factors that may affect social relationships and are commonly associated with emotional health of African Americans include experiences with discrimination and neighborhood characteristics (Berkman et al., 2000). Discrimination, in the form of even subtle daily acts and slights, has been associated with poorer mental health for African Americans (Williams & Williams-Morris, 2000). Neighborhood characteristics, both perceived and objective, are often associated with depressive symptoms among African Americans (Gary, Stark, & LaVeist, 2007; Schulz et al., 2006; Wilbur et al., 2009), although some research has found no evidence of this association (Schootman et al., 2007).

Other forms of social engagement are also related to emotional health. One study found that caregiving was associated with more stress and poorer mental

health for African American women (Rozario & DeRienzis, 2008). However, another study of women found that African American caregivers had less stress than White caregivers and experienced more benefits (Haley et al., 2004). Volunteering may positively affect the well-being of older adults (B. Cornwell et al., 2008), including African Americans (Barron et al., 2009; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003).

Method

The data are from the Milwaukee African American oversample of the second Midlife Development in the United States (MIDUS II) study, 2005-2006 (Almeida et al., 2008). MIDUS II is a longitudinal study sponsored by the National Institute on Aging, designed to examine the health and well-being of African American adults. The sampling frame included 99 census tracts with populations at least 40% African American in Milwaukee County, Wisconsin. Data were collected from 79 of these census tracts. MIDUS II was designed to obtain a sample that would represent the study area in terms of factors such as age, gender, and socioeconomic status (Elver & DiLoreto Oliver, 2007). The sample includes 592 adults ages 35 to 85; most participants were at midlife or at younger-old ages. Data were collected in face-to-face, computer-assisted personal interviews and with subsequent mailed self-administered questionnaires. The overall participation rate was 70.7%. No data were collected about nonrespondents. For the analysis reported in this study, a small number of respondents were excluded because of missing data for the variables of interest ($n = 22$, 4% of the responding sample).

Measures. The outcome, self-rated emotional health, was measured as a follow-up question to: "In general, would you say your physical health is excellent, very good, good, fair, or poor?" Participants were then asked, "What about your mental or emotional health?" with the same available response categories. Based on the common practice in related research, and also on the distribution of self-rated emotional health in the data used for this analysis, responses for both items were dichotomized into excellent, very good, or good (1) and fair or poor (0). Hereafter we refer to the former category as "better" self-rated emotional health (SREH).

Social ties. We focus on associations between social ties with family or friends, controlling for the presence of a spouse or partner (yes = 1), and self-rated emotional health. The quantity aspects of social ties were assessed by the frequency of family contacts (several times per week, yes = 1) and frequency of friend contacts (several times per week, yes = 1). The quality of respondents'

social relationships was measured by scales assessing their self-reported levels of strain and perceived emotional support for each type of relationship (family or friend) (Walen & Lachman, 2000).

For family relationships, the scale items asked for information "not including your spouse or partner." Thus, responses to the questions about family focus on family members other than spouses or partners. Family support and friend support were measured by scales consisting of 4 items each, with responses from 1 = *not at all* to 4 = *a lot*. Items in the scale were: "How much do members of your family really care about you? How much do they understand the way you feel about things? How much can you rely on them for help if you have a serious problem? How much can you open up to them if you need to talk about your worries?" The same questions also were asked substituting "friends" for "family members." Scores were calculated as the average of the four items. Family strain and friend strain were similarly measured with scales consisting of four items each, with responses ranging from 1 = *never* to 4 = *often*. These items were: "How often do members of your family make too many demands on you? How often do they criticize you? How often do they let you down when you are counting on them? How often do they get on your nerves?" The same items were asked about participants' friends. Scores were calculated as the average of the four items. Cronbach's alphas for these four scales ranged from .80 (family strain) to .90 (friend support).

Health and demographic characteristics included age, self-rated physical health, sex (female = 1), education, household income, and insurance status. We examined the possibility that age might be nonlinearly associated with SREH by examining unadjusted and adjusted associations using dummy variables representing various age categories. We found no evidence of a nonlinear association; thus, age was included in the models as a continuous variable. Better self-rated physical health was coded as a dichotomous variable as excellent, very good, or good (1) and fair or poor (0). Education was measured with four categories (1 = *no high school degree*, 2 = *high school or GED*, 3 = *some college or 2-year degree*, and 4 = *4-year college or graduate degree*). Total household income in dollars was divided by the number of individuals living in the home, to adjust for economies associated with household size. Respondents reported whether they currently had health insurance (yes = 1).

Perceived discrimination was measured by self-reports of types of discrimination experienced daily and over the individual's lifetime. For daily discrimination, a sample item was, "On a day-to-day basis, due to discrimination are you treated with less courtesy than other people?" For each question, respondents reported if they experienced that type of daily discrimination. The variable entered in the models to represent daily discrimination was the sum of the types of daily discrimination reported by respondents (range from 0 through 9).

For lifetime discrimination, items were phrased as, "Due to discrimination, have you ever been . . . ." A sample item is, " . . . denied or provided inferior medical care?" The variable values counting the types of discrimination experienced throughout the respondent's life could range from 0 to 11. Both measures were developed and validated in a previous study (Williams et al., 1997).

Perceived neighborhood quality was measured using a four-item scale (Keyes, 1998), with responses from 1 = *low* to 4 = *high*. A sample item is: "People in my neighborhood trust each other." Cronbach's alpha for this scale was 0.59. We acknowledge the modest level of internal consistency as a limitation of this measure.

Multiple self-reported social engagement factors were assessed, with dichotomized responses (1 = yes). These items included whether the respondent had been a caregiver in the last 12 months and whether she or he volunteered. Respondents also indicated if they had no job or were retired.

Statistical Analysis

Analysis included descriptive, chi-square, and logistic regression. Data were analyzed using SPSS version 17 (SPSS, 2010). Unadjusted odds ratios (ORs) and 95% confidence intervals (CIs) were calculated to measure associations between the individual social support variables and SREH.

The adjusted analysis was conducted with two models that examined associations between social ties and SREH. Model 1 included all of the social relationship variables. Thus, the result for a given social relationship represented in Model 1 was adjusted for the individual's other reported social relationships and their characteristics. Model 2 (full model) included the variables in Model 1, together with all of the control variables present in the theoretical model. Based on the result in Model 2 for the effect of daily discrimination, we tested two interaction terms in the full model to examine whether social ties might moderate the negative association between discrimination and SREH. The statistical significance of the interaction was evaluated with the likelihood ratio test. Tests of multicollinearity were conducted for all multivariate models. The tests for multicollinearity did not suggest any problems for estimating these models.

Results

Participant Characteristics. The analytic sample used for this study included 570 participants. Table 1 shows participant characteristics. Over 83% of participants reported better SREH; the remaining participants reported fair or poor health. The average participant age was 51.7 years (*SD* = 11.9).

Table 1. Participant Characteristics, Milwaukee African American Sample of the Second Midlife Development in the United States (MIDUS II) Study, 2005-2006 (n = 570)[a]

Characteristic	Percentage of sample or mean (SD)
Good to excellent self-rated emotional health (yes/no)	83.5
Social support	
Married or has partner (yes/no)	38.2
Has family contacts several times per week (yes/no)	64.4
Family strain (scale: 1 = never, to 4 = often)	2.2 (0.8)
Family support (scale: 1 = not at all, to 4 = a lot)	3.4 (0.7)
Has friend contacts several times per week (yes/no)	57.0
Friend strain (scale: 1 = never, to 4 = often)	1.9 (0.7)
Friend support (scale: 1 = not at all, to 4 = a lot)	3.1 (0.9)
Health and demographic characteristics	
Age in years	51.7 (11.9)
Female (yes/no)	62.6
Household income per person	$19,616 (21,666)
Education	
1 = no high school degree	18.6
2 = high school degree or GED	36.5
3 = some college or 2-year degree	31.2
4 = 4-year or graduate degree	13.7
Currently has health insurance (yes/no)	86.5
Physical health, self-rated good to excellent (yes/no)	65.4
Social structural characteristics	
Summary of lifetime discrimination events (0 to 11)	2.5 (2.6)
Summary of daily discrimination events (0 to 9)	2.2 (2.6)
Neighborhood quality, self-rated (scale: 1 = low; 4 = high)	3.1 (0.7)
Social engagement characteristics	
Has no job or is retired (yes/no)	39.8
Caregiver in last 12 months (yes/no)	14.7
Volunteers (yes/no)	33.9

[a]Data source: the second Mid-Life Development in the United States study (MIDUS II) (Almeida et al., 2008).

About 17.5% of participants were younger than 40; 30.2% were 40 to 49; 28.1% were 50 to 59; about 14.7% were 60 to 69; and the remainder were 70 or older (age categories not shown in table). Only 38.2% of participants

Table 2. Unadjusted Associations Between Social Ties and Self-Reports of Good, Very Good, or Excellent Self-Rated Emotional Health Among African Americans, $n = 570$[a]

	Odds ratio (95% confidence interval)
Has spouse or partner (yes/no)	1.00 (0.63, 1.57)
Has family contact several times per week (yes/no)	1.15 (0.73, 1.81)
Family strain scale[b]	0.61 (0.46, 0.81)***
Family emotional support scale[c]	2.89 (2.14, 3.92)***
Has friend contact several times per week (yes/no)	1.27 (0.81, 1.98)
Friend strain scale[b]	0.87 (0.65, 1.17)
Friend emotional support scale[c]	1.86 (1.46, 2.38)***

[a]Data source: Milwaukee African American sample, 2005-2006, of the Midlife Development in the United States (MIDUS II) study (Almeida et al., 2008).
[b]Emotional strain scales: 1 = *never*, to 4 = *often*.
[c]Emotional support scales: 1 = *not at all*, to 4 = *a lot*.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

reported having a spouse or partner. Men were twice as likely as women to report having a spouse or partner (55.9% compared with 27.7%, data not shown in table). About 64.4% of respondents said they had contacts with family several times per week; 57% reported frequent contacts with friends. The score on the family support scale averaged 3.4. The comparable scale representing support from friends averaged 3.1.

Unadjusted Results. Table 2 shows unadjusted results measuring the association between social relationships and better SREH. Having a spouse or partner was not associated with SREH. The odds of reporting better SREH increased by 189% for each additional unit on the family emotional support scale (OR = 2.89, CI [2.14, 3.92]). Also associated with better SREH was having received emotional support from friends (OR = 1.86, CI [1.46, 2.38]). Each additional unit on the family strain scale was associated with 39% lower odds of better SREH (OR = 0.61, CI [0.46, 0.81]).

Adjusted Results. Table 3 shows the two multivariate models that examine associations between social relationships and better SREH. In Model 1, which includes all of the social relationship variables, family emotional support was significantly associated with better SREH (OR = 2.49, CI [1.74, 3.56]), as was emotional support received from friends (OR = 1.56, CI [1.14, 2.12]).

In Model 2, which included all of the variables in the theoretical model, family emotional support was significantly associated with better SREH, although the magnitude of the association was attenuated. Each additional unit

Table 3. Adjusted Results of Logistic Regression Predicting Good, Very Good, or Excellent Self-Rated Emotional Health Among African Americans, $n = 570$[a]

Characteristics	Model 1 Odds ratio (95% confidence interval)	Model 2 Odds ratio (95% confidence interval)
Social support		
Has spouse or partner (yes/no)	1.00 (0.61, 1.64)	0.52 (0.27, 1.00)*
Has family contact several times per week (yes/no)	0.76 (0.45, 1.27)	0.73 (0.38, 1.40)
Family strain[b]	0.91 (0.66, 1.27)	0.89 (0.61, 1.32)
Family emotional support[c]	2.49 (1.74, 3.56) ***	2.18 (1.43, 3.32)***
Has friend contact several times per week (yes/no)	0.86 (0.49, 1.50)	0.81 (0.42, 1.59)
Friend strain[b]	0.96 (0.69, 1.34)	1.01 (0.68, 1.51)
Friend emotional support[c]	1.56 (1.14, 2.12)**	1.59 (1.07, 2.34)*
Health and demographic characteristics		
Age in years		1.00 (0.98, 1.03)
Female (yes/no)		0.34 (0.17, 0.70)**
Household income per person (/10,000)		1.06 (0.88, 1.27)
Education[d]		1.12 (0.80, 1.56)
Currently has health insurance (yes/no)		1.01 (0.45, 2.27)
Physical health, self-rated good to excellent (yes/no)		8.05 (4.30, 15.07)***
Social structural characteristics		
Types of lifetime discrimination (0 to 11)		0.97 (0.86, 1.10)
Types of daily discrimination (0 to 9)		0.84 (0.74, 0.95)**
Neighborhood quality (scale: 1 = *low*; 4 = *high*)		1.25 (0.84, 1.85)
Social engagement characteristics		
Has no job or is retired (yes/no)		0.38 (0.20, 0.72)**
Caregiver in last 12 months (yes/no)		0.43 (0.21, 0.86)*
Volunteers (yes/no)		2.38 (1.17, 4.83)*
−2 × Log Likelihood	451.4	331.3

Results are from standard logistic regression.

[a]Data source: Milwaukee African American sample, 2005-2006, of the Midlife Development in the United States (MIDUS II) study (Almeida et al., 2008).

[b]Emotional strain scales: 1 = *never*, to 4 = *often*.

[c]Emotional support scales: 1 = *not at all*, to 4 = *a lot*.

[d]Education coded as: 1 = *no high school degree*, 2 = *high school degree or GED*, 3 = *some college or 2-year degree*, 4 = *4-year or graduate degree*.

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

on the family emotional support scale was associated with 118% greater odds of better SREH (OR = 2.18, CI [1.43, 3.32]). Each increase on the friend support scale was associated with 59% greater odds of better SREH (OR = 1.59, CI [1.07, 2.34]). Having a spouse or partner reduced the odds of better SREH by 48% (OR = 0.52, CI [0.27, 1.00]). Women had lower odds than men of having better SREH (OR = 0.34, CI [0.17, 0.70]). Better self-rated physical health was strongly associated with better SREH (OR = 8.05, CI [4.30, 15.07]).

Regarding social structural characteristics, each additional type of reported daily discrimination was associated with 16% lower odds of having better SREH (OR = 0.84, CI [0.74, 0.95]). Thus, those who reported the mean number of types of daily discrimination (M = 2.2, Table 1) had 35.2% lower adjusted odds (16 × 2.2) of reporting better SREH than those who reported no daily discrimination. In models that included the interaction of family emotional support and daily discrimination (not shown in table), the comparable main effect OR representing daily discrimination was 0.46 ($p < .05$ for the addition of the interaction), representing the effect of daily discrimination for those with the least family support. Thus, for those with the least family support, each increase in the number of types of reported daily discrimination was associated with 54% lower adjusted odds of having better SREH, a substantially greater negative effect than the 16% lower adjusted odds associated with the same change averaged across all participants and levels of family support. In another model that tested the interaction of friend emotional support and daily discrimination, the main effect OR representing daily discrimination was 0.59 ($p < .006$ for the addition of the interaction). This odds ratio indicates the effect of types of daily discrimination events for those with the least friend support. When both interaction terms were included in the model, the OR for the main effect of discrimination, representing those without friend or family support was 0.37 ($p < .001$). Thus, participants without family or friend support with the mean number of types of daily discrimination had 138.6% (63 × 2.2) lower adjusted odds of having better SREH than analogous participants who reported no daily discrimination. This result suggests that friend support and family support may reduce effects of daily discrimination on SREH (data not shown in table).

Several other characteristics associated with social engagement were also significantly related to better SREH in Model 2. African Americans who reported not having a job or being retired had 62% lower odds of having better SREH (OR = 0.38, CI [0.20, 0.72]). Those who reported being a caregiver had 57% lower odds of having better SREH (OR = 0.43, CI [0.21, 0.86]). Volunteering was associated with better SREH: African Americans who volunteered had nearly 2.4 times the odds of having better SREH (OR = 2.38, CI [1.17, 4.83]).

Discussion

Ours is the first study to examine associations among multiple types of social ties, as well as assessments of the frequency and quality of those ties, with self-rated emotional health among a large group of midlife and older African Americans. In unadjusted results, receiving emotional support from family and receiving emotional support from friends were positively associated with better SREH. Strain from family was negatively associated with better SREH. In adjusted results, the quality of the relationship, as measured by perceived emotional support received from family, was positively associated with SREH. Similarly, the quality of relationships with friends was positively associated with SREH. The association between emotional support from family and better SREH is consistent with previous research (Bertera, 2005; Dupertuis et al., 2001; Lincoln et al., 2005; Ryan & Willits, 2007; Walen & Lachman, 2000). The positive finding of the association of friend support with better emotional health confirms the importance of extended family among African Americans, which often include non-kin (Porter et al., 2000).

The present study contributes to the social ties literature by incorporating measures of contact with friends and family, as well as measures of emotional support or strain that indicate the quality of those relationships. Previous related research generally has been limited to examining the association between one particular type of relationship and its quality with emotional health or associations between the number or type of an individual's relationships with his or her health. This body of research has also most often focused on older White participants. Taken as a whole, the findings were consistent with our expectation that the quality of social ties would be associated with SREH among African Americans.

Consistent with our second hypothesis, the present study found that daily discrimination was negatively associated with SREH. This result is generally consistent with previous research that has found reports of daily discrimination by African Americans were significantly associated with poorer psychological (Schulz et al., 2006; Williams, Neighbors, & Jackson, 2003; Williams & Williams-Morris, 2000) and physical health (Barnes et al., 2008; Lewis, Aiello, Leurgans, Kelly, & Barnes, 2010; Lewis et al., 2009). The findings also suggest that emotional support from family and from friends may substantially mitigate the negative effect of daily discrimination on SREH. This finding is consistent with research suggesting that social support may buffer effects of stress (Cohen & Wills, 1985; Kawachi & Berkman, 2001) and with research by Utsey, Giesbrecht, Hook, and Stanard (2008), which suggested that social resources among African Americans may help reduce stress associated with discrimination.

The findings of the present study also suggest that having a spouse or partner may be negatively associated with SREH. This result is consistent with studies reviewed by Mills and Edwards (2002). In a longitudinal study, Umberson, Williams, Powers, Liu, and Needham (2006) found that marital strain had a larger effect on older adults than on middle-aged adults. The limited number of married participants did not allow us to examine associations between the quality of marital relationships and SREH.

Our findings support the theoretical framework proposed by Berkman and her colleagues (2000). Supportive ties, social structural characteristics, and social engagement factors were significantly associated with emotional health of African Americans. We also found evidence that emotional social support may buffer the stress of daily discrimination, consistent with the stress buffering hypothesis (Cohen & Wills, 1985; Kawachi & Berkman, 2001; Pascoe & Richman, 2009).

We acknowledge several study limitations. The data were cross-sectional and do not provide a basis for inferring causality. Although we used the framework developed by Berkman et al. (2000) to guide our selection of the control variables, future research applying the model to longitudinal data would be useful. Another consideration is that all data were from one geographic area, an urban county in the North Central United States. The results may not be generalizable to other areas of the United States, particularly rural or Southern areas. The measures used to assess relationship strain and support did not allow participants to characterize relationships as generally positive and supportive or chronically negative and strained, as compared with temporary periods of intimacy or disagreement (Walen & Lachman, 2000). This issue would be likely to affect the results only if resulting measurement error were nonrandomly distributed among groups defined by relationship type or quality. We have no reason to believe that this would be the case, although it is possible that individuals who report strain may be more likely than others to have relationships with chronic strain.

The daily and lifetime discrimination measures are subject to substantial measurement error. *Types* of reported discrimination events were counted, rather than the number of such events. An individual who had experienced even a large number of discrimination events might have reported only a single type, or only a few. For lifetime discrimination, the data do not indicate whether the discrimination occurred recently, in the past, or both. The lack of a statistically significant result associated with lifetime discrimination may reflect measurement error. In addition, the questions about discrimination did not focus on a particular cause, such as discrimination based on race. An individual who had experienced discrimination based on factors such as gender, age, body size, sexual orientation, income, or other factors might have been

equally likely to respond that she or he had experienced discrimination. This survey feature should be noted when interpreting the results. In future research, including measures of stressful life events and the timing of their occurrence during the life course, as well as measures of chronic stress and daily hassles (Williams et al., 2003), would be useful.

Findings from this study contribute to the literature on the important role of quality of social ties, particularly in relation to buffering the effects of experiences with discrimination. The finding on the supportive aspect of friend ties is particularly valuable, as ties with friends are examined less frequently. These findings point to several research and practice implications. Given the complexity of social relationships, qualitative research is needed to better understand the role of social relationships in the emotional health of African Americans, particularly with reference to kin, non-kin, voluntary kin (Braithwaite et al., 2010), and church-kin relationships. Research using mixed methods also would be valuable, such as incorporating a qualitative component with a subset of participants in a survey such as the MIDUS. Examining marital ties more fully, as well as differences in supportive relationships between men and women among African Americans, would be useful in future research. From the perspective of practice, physicians and other providers of health care and social services may find it helpful to ask patients or clients about the quality of the emotional support they receive from family and friends. Education and outreach by helping professionals to communicate the importance of social ties to the health and well-being of midlife or older African Americans may also be indicated. Clergy could be particularly effective in communicating this message, given the important role of the church in African American communities.

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