Race-Related Stress and Hopelessness in Community-Based African American Adults:

Moderating Role of Social Support

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Abstract

Objectives: The mental health outcomes associated with racial discrimination are well documented in scientific literature. Despite strong links to mental illness, hopelessness is largely overlooked as a consequence of discrimination in empirical research. The current study examined the association of race-related stress and hopelessness in a community sample of African American adults. Utilizing a risk-resilience framework, multiple dimensions of social support were examined as plausible protective factors against the negative effects of race-related stress.

Method: Self-report measures of race-related stress (IRRS-B; Utsey & Ponterotto, 1996), hopelessness (BHS; Beck, Weissman, Lester, & Trexler, 1974), and social support (ISEL; Cohen & Hoberman, 1983) were administered in a sample of African American adults (N = 243; mean age = 35.89 years).

Results: Multiple regression analyses were conducted to assess the main and interactive effects of race-related stress and three dimensions of social support (appraisal, belonging, and self-esteem) in relation to hopelessness ratings. All dimensions of social support were associated with self-reported hopelessness, with the self-esteem dimension emerging as the strongest predictor. Though self-esteem social support buffered the role of race-related stress on self-reported hopelessness, appraisal and belonging support did not.

Conclusion: Individual and collective morale for one's racial group (via self-esteem social support) may be especially valuable for African Americans who face racial discrimination.

Findings highlight the importance of culturally-relevant factors that may ameliorate the effects of race-related stress.

Keywords: Race-related stress, discrimination, African Americans, hopelessness, social support

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Moderating Role of Social Support

Experiences of racism and discrimination have served as a primary source of stress for African Americans (Brown et al., 2000; Clark et al., 1999; Harrell, 2000; Mays, Cochran, & Barnes, 2007; Ong et al., 2009). An estimated 1 in 3 African Americans reported having at least one personal experience of discrimination in the previous year (Doherty, 2013). As racism persists, there remains an urgent need to understand the psychological consequences for African American adults. Hopelessness is widely considered a stress response to the experience of racism and is linked to negative health outcomes including depression and physical illness among African American populations (Chae, Lincoln, & Jackson, 2011; Clark, Anderson, Clark, & Williams, 1999; Fernando, 1984; Noh & Kaspar, 2003; Ong, Fuller-Rowell, & Burrow, 2009; Polanco-Roman & Miranda, 2013), but is rarely examined via empirical investigation. Abramson et al. (1989) conceptualized hopelessness as "the expectation that highly desired outcomes are unlikely to occur or that highly aversive outcomes are likely to occur and that no response in one's repertoire will change the likelihood of these outcomes" (p. 359). However, not all African Americans who experience racial discrimination develop feelings of hopelessness. Social support is frequently cited as a protective buffer that may ameliorate the effects of race-related stress based on the collectivist nature of African American culture (i.e., Clark et al., 1999; Seawell, Cutrona, & Russell, 2014; Utsey, Lanier, Williams, Bolden, & Lee, 2006). Thus, the current study employs a risk-resilience model (Ingram & Luxton, 2005; Rutter, 1987) that conceptualizes race-related stress as risk and social support as the mechanism of resilience to hopelessness in a community-based sample of African American adults.

Risk-Resilience Model

Risk-resilience models (Cauce, Cruz, Corona, & Conger, 2011; Ingram & Luxton, 2005; Lamis, Wilson, Tarantino, Lansford, & Kaslow, 2014; Rutter, 1987; Salami, Brooks, & Lamis, 2015) provide a comprehensive approach to understanding how psychopathology can emerge. Risk factors are attributes or conditions that increase the likelihood and severity of psychological conditions. In contrast, resilience factors are attributes or conditions that buffer psychological distress by ameliorating risk. In statistical models, resilience factors often function as moderators of the relationship between risk variables and psychological outcomes. Thus, a strong framework for understanding the course and maintenance of psychopathology involves not only identifying factors that bring about risk or factors that buffer against psychological distress, but understanding the interplay between risk and resilience factors to inform our understanding of psychological health. For underserved populations, such as ethnic minority populations, examining culturally and contextually relevant variables that confer risk and resilience may provide a more concise model of psychopathology that can inform culturally sensitive prevention and intervention efforts.

Race-Related Stress as a Source of Risk

When acts of discrimination are perceived to exceed individual and collective resources, the resulting stress may threaten one's well-being (Harrell, 2000). Comparable to daily-life stress (i.e., Folkman & Lazarus, 1980; Lazarus & Folkman, 1984), scholars have coined the term *race-related stress*³ (Harrell, 2000; Utsey & Ponterotto, 1996) to describe the occurrence of racism and discrimination that African Americans experience. In addition to general daily life stressors,

³ Harrell (2000) used the term *racism*-related stress. However, the term *race*-related stress (Utsey & Ponterotto, 1996) will be utilized to promote consistent terminology throughout the current text.

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race-related stress is posited to play a role in the deleterious physical and psychological health outcomes of African Americans, contributing to health disparities among ethnic minority populations (Clark et al., 1999). In previous literature, perceived discrimination and resulting race-related stress were positively associated with poor well-being and life satisfaction (Schulz et al., 2000; Williams et al., 2007; Williams, Neighbors, & Jackson, 2003; Williams, Yu, Jackson, & Anderson, 1997), low self-esteem (Fisher, Wallace, & Fenton, 2000; Rumbaut, 1994; Verkuyten, 1998), major depression (Brown et al., 2000; Karlsen & Nazroo, 2002; Kessler, Mickelson, & Williams, 1999; Siefert, Bowman, Heflin, Danziger, & Williams, 2000) anxiety (Kessler et al., 1999), and psychosis (Karlsen & Nazroo, 2002). Furthermore, scholars have posited several potential psychological responses to race-related stress, including anger, paranoia, anxiety, fear, frustration, resentment, and hopelessness (Bullock & Houston, 1987; Clark et al., 1999; Harrell, 2000).

Fernando (1984) described the experience of racial discrimination as one in which the victim is deprived of control of their environment and the discriminatory event that occurs. He posited that those who encounter ethnic discrimination may become hopeless "in the face of recurrent injustices they cannot rectify" (p. 44). Available evidence similarly suggests that the relationship between hopelessness and related psychopathology may be exacerbated by high levels of stress (Dixon, Heppner, Burnett, & Lips, 1993; Polanco-Roman & Miranda, 2013). Compared to White and Hispanic adults, this association was found to be particularly relevant for African Americans and may be attributed to the likelihood of acculturative, economic, and environmental stress among those in the African American community (Hirsch, Visser, Chang, & Jeglic, 2012). Among African Americans, hopelessness has been reported as the strongest predictor of suicidality (Durant et al., 2006; Hirsch, Visser, Chang, & Jeglic, 2012). Despite

compelling accounts of hopelessness and subsequent psychopathology, there remains a dearth of empirical literature in which hopelessness is examined as a primary outcome of race-related stress.

In addition to the absence of race-related stress and hopelessness in the available literature, another shortcoming of the discrimination and mental health outcomes literature is that discrimination is often broadly defined and quantified using measures of limited validity. For example, many existing studies draw associations between discrimination and mental health using measures that only assess the *frequency* of discriminatory events. This method implies that the frequency with which one experiences discrimination is directly proportional to the resulting level of distress. While this may be accurate in some cases, individuals vary in the degree of negative attributions associated with stressful events. Thus, the use of measures that allow the individual to appraise their level of psychological distress as a result of the event is advantageous.

To date, only one study has empirically examined the negative effects of hopelessness associated with discrimination and race-related stress in a sample of ethnic minorities (Polanco-Roman & Miranda, 2013). In this study of 143 college students, investigators found that perceived discrimination was associated with high endorsement of hopelessness. Further, the presence of hopelessness served as a mediating factor between perceived discrimination and depressive symptoms, as well as suicidal ideation. While the use of multiethnic samples is beneficial in providing preliminary insight for continued research, investigations that disaggregate unique stressors for specific racial/ethnic groups are needed to draw more precise conclusions.

Social Support as a Resilience Buffer

Risk and resilience factors jointly influence emotional vulnerability (Clark et al., 1999; Fernando, 1984). That is, certain factors may serve to mitigate the impact of an individual's psychological risk and subsequent distress (Lazarus & Folkman, 1984). For example, early hopelessness theorists identified (the absence of) social support as an integral factor in the development of hopelessness and subsequent psychological distress (Abramson, Metalsky, & Alloy, 1989; Brown & Harris, 2012). Other studies (Cohen & McKay, 1984; Cohen & Wills, 1985; Raffaelli et al., 2013; Seawell et al., 2014) corroborate a buffering hypothesis which suggests that high levels of social support can protect against stress-induced psychopathology. In contrast to Western ideals of individualism, scholars have characterized African American culture as one of interconnectedness (Constantine, Gainor, Ahluwalia, & Berkel, 2003). The culture, of seeing others as interconnected to oneself, lends to social support as a viable and salient resilience factor for African Americans who face discrimination.

Though the literature for social support as a psychological buffering seems extensive, challenges in operationalizing social support has undermined this important body of research.

Namely, flexible study-by-study adaptation of what constitutes social support has caused inconsistencies in measurement, study design, and predictive utility (Barrera Jr., Sandler, & Ramsay, 1981; Brookings & Bolton, 1988; Cohen & Hoberman, 1983; Cohen & McKay, 1984; Cohen & Wills, 1985; Prelow, Mosher, & Bowman, 2006; Seawell et al., 2014). Further, the existing empirical research on social support as a buffer for race-related stress is both limited and inconsistent. To illustrate, Prelow and colleagues (2006) found that the buffering hypothesis was not supported in a sample of African American college students. However, the authors did find that high levels of perceived discrimination were associated with lower levels of social support.

Conversely, Seawell and colleagues (2014) observed that sources of social support tailored to cope with racial discrimination demonstrated a classic buffering effect in reducing depressive symptoms over time. The findings highlighted the importance of specificity of social support that is responsive to the specific stressor, consistent with previous arguments (Cohen & Hoberman, 1983; Cutrona & Russell, 1990). Contrary to traditional study of social support as a unitary construct, a focus on specific types of social support may lead to deeper understanding of which specific aspects of social support moderate the effects of discrimination on hopelessness.

To address inconsistencies in the literature, Cohen and Hoberman (1983) examined a four-dimension model of social support that included appraisal, belonging, self-esteem, and tangible support. They asserted that the multidimensional components of support match the needs elicited by a particular stressor, differently. Consequently, they proposed multiple dimensions of social support. Appraisal support (defined as the perceived availability of persons in which to confide about one's problems) is suggested to be universal in nature, as almost all stressful events require one to assess the threats posed by a situation and determine their ability to cope (Cohen et al., 1985). As an example, confiding in a spouse or friend may assist in the reappraisal of stressful situations as non-threatening, and subsequently buffer heightened stress levels that accompany smoking cessation (Cohen et al., 1985; Mermelstein, Cohen, Lichtenstein, Baer, & Kamarck, 1986). Belonging support (the perceived availability of persons one can do things with) reflects the importance of healthy attachments when coping with stress (Hale, Hannum, & Espelage, 2005) and has been linked to perceived health and fewer reported physical symptoms among college students. Self-esteem support is defined as the presence of others to which one might compare, favorably. According to Cohen and McKay (1984), self-esteem support is particularly relevant when faced with stressors that are perceived as beyond one's

control, thus inducing a sense of perceived helplessness (Abramson, Seligman, & Teasdale, 1978). Notably, diminished self-esteem social support emerged as the strongest predictor of depressive symptoms (relative to other forms of social support) in a clinical sample (Johnson, Meyer, Winett, & Small, 2000). Self-esteem support was also the strongest buffer of stress among students (Cohen & Hoberman, 1983) and may be of particular importance in the face of perceived discrimination (Fernando, 1984). In sum, social supports may vary in functional capacity, affirming the assertion that different stressors require specific means of support (i.e., Cohen & Hoberman, 1983; Cutrona & Russell, 1990; Seawell et al., 2014). Partitioning social support into multiple dimensions and examining how different support-based variables differentially affect psychological distress may serve to reduce the notable inconsistencies in the social support and psychological distress literature.

Current Study

The purpose of the present study was to address noted limitations of the current literature by examining the association between race-related stress and hopelessness in a community sample of African American adults, as well as the potential buffering qualities of multiple dimensions of social support (belonging, appraisal, and self-esteem 4) on that association. The explicit hypotheses for the current study were: 1) higher reported race-related stress will be associated with highly endorsed hopelessness in African American adults; 2) lower perceived social support will be associated with highly endorsed hopelessness; 3) social support will moderate the relationship between race-related stress and hopelessness, such that higher race-related stress is related to higher ratings of hopelessness for those who report low, but not high

⁴ The fourth dimension of Cohen & Hoberman's (1983) conceptualization (tangible social support; the perceived availability of material resources) was not relevant to the proposed model of perceived racism and hopeless and was thus not included in the current analyses.

perceived social support; and that 4) specific types of social support will elicit unique contributions to the buffering model, with self-esteem emerging as the strongest moderator of race-related stress and hopelessness (Clark et al., 1999; Fernando, 1984).

Methodology

Participants

Participants were 243 community-based African American men (53.5%) and women (46.5%) age 18-65 years (M = 35.89, SD = 12.41). Volunteers for the study resided in the southern region of the United States and were recruited via advertisement and word of mouth in community-based social settings. Approximately 67% of participants indicated that they, their parents, and grandparents were born in the U.S., while 23% indicated that they or their parents were foreign-born. Additionally, the majority of the sample had obtained at least a high school education or some college/special training (31.4%, 29.4% respectively).

Measures

Index of Race Related Stress-Brief (IRRS-B). Race-related stress was measured using the IRRS-B (Utsey & Ponterotto, 1996), a 22-item index consisting of three subscales to measure the emotional impact of discrimination at the institutional, cultural, and individual levels. Participants are asked to review a list of common discriminatory experiences, indicate which events they have experienced (either personally or by a friend or family member), and rate the resulting level of distress at the time of the event. The index contains statements such as "You were refused an apartment or other housing; you suspect it was because you are Black," in which participants select a response ranging from 0 (*This has never happened to me*") to 4 ("Event happened and I was extremely upset"), in order to measure the resulting levels of distress. In the event that a discriminatory experience occurred on more than one occasion, participants are

instructed to assess their reaction based on the first time that the experience occurred. Scores for the subscale were summed and averaged, with higher scores indicating higher levels of racerelated stress. The IRRS-B has demonstrated acceptable reliability (α = .79) (Utsey & Ponterotto, 1996) and validity in African American samples (Utsey & Ponterotto, 1996; Utsey, Ponterotto, Reynolds, & Cancelli, 2000). The total score was utilized for the current study as a global index of race-related stress and a reliability of α = .93 was obtained.

The Interpersonal Support Evaluation List (ISEL). The ISEL (Cohen & Hoberman, 1983) is a 40-item scale that was utilized to measure belonging, self-esteem, and appraisal-based social support in the current study. Estimates of reliability and validity have been reported for the ISEL across clinical and non-clinical samples (i.e., Bauman, Haaga, Kaltman, & Dutton, 2012; Cohen & Hoberman, 1983; Hale et al., 2005; Mermelstein et al., 1986; Payne et al., 2012; Rogers, Anthony, & Lyass, 2004). A multidimensional approach that provides specificity of social support function beyond that of scales that solely measure general social support has been recommended (Brookings & Bolton, 1988).) The scale assesses the availability of appraisal (i.e., "I know someone who I see or talk to often with whom I would feel perfectly comfortable talking about problems"), belonging (i.e., "Lately, I often feel lonely, like I don't have anyone to reach out to"), and self-esteem social support (i.e., "I am as good at doing things as other people are") as well as tangible support. Participants rate each item as 1 (*Probably True*) or 2 (*Probably True*) False) and higher scores reflect increased levels of perceived social support after accounting for reverse-scored items. Despite moderate correlation across ISEL subscales (Cohen et al., 1985), previous studies confirm the independent function of the subscales in various contexts (i.e., Bauman, Haaga, Kaltman, & Dutton, 2012; Brookings & Bolton, 1988; Payne et al., 2012; Rogers, Anthony, & Lyass, 2004; Schonfeld, 1991). Cohen and Hoberman (1983) reported

internal reliability for each subscale (Appraisal = .77, Belonging = .75, Self-esteem = .60) in a sample of students. Subscales of the ISEL have demonstrated internal reliability (Appraisal = .83, Belonging = .61, Self-esteem = .64) in predicting depression in non-clinical samples (Brookings & Bolton, 1988). Individual reliability estimates in the current study are comparable to previous studies (Appraisal: .85, Belonging: .66, Self-Esteem: .65).

The Beck Hopelessness Scale (BHS). Hopelessness was evaluated via the BHS (Beck et al., 1974) which consists of 20 true-false statements that assess negative expectancies about the future. An example item is "My future seems dark to me." Higher scores indicate increased hopelessness. The BHS has demonstrated acceptable validity in measuring suicidal behavior in depressed and non-depressed individuals, as well as strong internal consistency (α = .93) (Beck et al., 1974). In the current study, α = .89.

Procedure

The current study was granted full institutional review board approval. Interested parties were screened in a brief phone interview; those who were not 18 years of age, or who did not self-identify as Black or African American, or who experienced recent loss of consciousness due to substance use in the past two weeks were not included in the study. Following consent to participate, volunteers were invited to complete a pencil and paper survey that included a demographic questionnaire as well as a battery of measures assessing well-being. Participants were informed of their right to cease at any time and the availability of referral services for emotional health, if needed. The questionnaire took approximately 1.5-2 hours to complete, and participants were given \$25 compensation upon completion of the study.

Results

Preliminary Analyses

Measured variables were screened for missing data and outliers. The number of missing items across variables ranged from 0-9 (0-3.3%). Listwise deletion was employed as an automatic step in PROCESS Macro (Hayes, 2012) to address missing data. Outliers were observed for three variables in the data—education level, hopelessness scores, and belonging support scores). For education level, 7 outlier responses deviated from study response options and were thus removed from the analyses. Hopelessness and belonging support also included a minimal amount of extreme values. However, these values likely reflected patterns of participant response, rather than error. Thus, the data were truncated (most extreme value replaced with the next reasonable value) to retain power while reducing the risk of potential bias (Costa, 2014). Given the removal of 7 cases, data were analyzed for n=236 participants.

Analyses of statistical power and required sample size were conducted using G^* Power statistical software (Faul, Erdfelder, Lang, & Buchner, 2007) to determine the minimal number of participants required to conduct bivariate correlation analyses for the current study. Cohen (1988; 1992) suggested an estimated medium effect size of .30 when conducting bivariate correlation analyses. Using an alpha of .05 and power of 0.80, the projected sample size required was 67 participants. Thus, power required for bivariate analyses for the current sample (N = 236) exceeded .80. A second power analysis was conducted to determine the number of participants required to conduct a hierarchical linear regression analysis. For this analysis, the maximum amount of predictor variables to be entered in a single multiple regression (including the covariate and interaction terms) totaled 8. Given an estimated medium effect size of 0.15, an alpha of .05, and power of .80 (Cohen, 1988, 1992), the projected sample size required for this

analysis was 103 participants. Thus, power for the current sample (N = 236) exceeded .80 for all study analyses.

Means, standard deviations, and intercorrelations for all measures are presented in Table 1. As IRRS scores increased, so did BHS scores. However, this observed pattern was not statistically significant (r = .10, p = .137). Each form of social support, however, was significantly associated with hopelessness in the expected direction, such that higher perceived availability of belonging (r = -.35, p < .001), appraisal (r = -.43, p < .001) and self-esteem (r = -.53, p < .001) social support were associated with lower ratings of hopelessness.

Test of Main Effects and Moderation

All analyses were conducted using SPSS statistical software package (Version 22). In Step 1 of the hierarchical linear regression, the potentially confounding influence of education level was controlled for, statistically (Broman, Mavaddat, & Hsu, 2000; Sigelman & Welch, 1994). In order to assess potential main effects of race-related stress and each dimension of perceived social support (appraisal, belonging, and self-esteem) on hopelessness ratings (BHS scores), IRRS-B and ISEL scores were entered simultaneously in Step 2. Finally, the interactive effects of each dimension of social support and race-related stress in the prediction of hopelessness were assessed in Step 3. Scores were mean-centered prior to analysis to promote clarity in interpretation (Hayes, 2012). A significant main effect was found for race-related stress [B=.031, p=.008, 95% CI (.008, .053)]), appraisal social support [B=-0.341, p=.001, 95% CI (-0.534, -0.149)], and self-esteem social support [B=-.897, p<.001, 95% CI (-1.163, -0.630)] in predicting BHS scores, though not for belonging social support [B=-0.094, p=.413, 95% CI (-0.319, 0.131)].

To test the hypothesis that specific types of social support will elicit unique contributions to the buffering model, with self-esteem emerging as the strongest moderator of race-related stress and hopelessness (Clark et al., 1999; Fernando, 1984), three interaction terms (race-related stress X appraisal social support; race-related stress X belonging social support; race-related stress X self-esteem social support) were examined in Step 3 of the regression model. Of the three interaction terms, race-related stress X self-esteem social support emerged as the only significant predictor of BHS scores [B = -.013, p = .028, 95% CI (-0.025, -0.001)]. The overall model that included sex, education level, IRRS-B scores, ISEL subscale scores, and the three interactions of IRRS-B X ISEL subscale scores was significant, F(10, 232) = 13.727, p = .032, and accounted for 37% of the variance in predicting BHS scores.

To further explore the nature of interactive effects, the cross products of race-related stress X self-esteem social support was plotted (see Figure 1). Additionally, specific regions of significance were determined using the Johnson-Neyman technique (Johnson & Fay, 1950). Results indicated that when self-esteem support scores were at or below 6.505 (uncentered value), the association for race related stress and hopelessness was significant. Approximately 57% of the sample fell at or below the region of significance (B = .0232) for self-esteem support. Thus, the association for race related stress and hopelessness varied according to the level of self-esteem (but not other dimensions of) social support.

Discussion

Consistent with a risk-resilience framework, we found that race-related stress was associated with feelings of hopelessness, but that this relationship was buffered in part by social support. Though social support is often examined as a unidimensional construct, our finding supports arguments for more complex investigation of social support buffers and sheds light on

inconsistencies in the literature whereby social support sometimes provides a buffer for social strain and at other times does not. While broad social support may bolster one's overall resilience, specific types of support are warranted in response to specific types of stressors. Our findings may provide insight to African Americans' relatively low risk for psychological disorder despite the persistence of race-based discrimination and other forms of social oppression. Gibbs (1997) documented the "paradoxical" nature of seemingly low suicide rates among African Americans despite social marginalization and poor access to mental health and healthcare, as well as overrepresentation among impoverished persons. This paradox may suggest the presence of psychological resilience embedded in the cultural practices of persons of African ancestry—practices that espouse collectivism and interdependence (Constantine et al., 2003).

The current study examined self-esteem, belonging, and appraisal dimensions of social support given the assertion that the source of support should match the stressor (Cohen & Hoberman, 1983; Cutrona & Russell, 1990). The results provide partial support for the risk-resilience model in that the effect of race-related stress on hopelessness was buffered by self-esteem support, but not by other types of support. As predicted, perceived appraisal and self-esteem social support were each inversely related to reported symptoms of hopelessness such that higher perceived social support was associated with lower self-reported hopelessness. Interestingly, diminished belonging support was not significantly associated with hopelessness. Varying associations of social support and hopelessness symptoms highlight the importance of differentiating between dimensions of social support.

Though self-esteem, belonging, and appraisal support were each predicted to buffer racerelated stress, self-esteem support was observed as the only buffer for race-related stress and hopelessness. That is, the perception that one compares favorably to others with regard to being thought of as capable, being socially better off, and having more life satisfaction was uniquely important relative to the mere presence of having a social network (e.g., belonging support) or persons to talk to about one's problems (appraisal support) in the face of race-related stress. Fernando (1984) suggested that perceived racism is not just an attack on one's culture, but a devaluing of the individual himself: his/her skin color, mannerisms, and way of life. Because persons of African ancestry may see one's personal welfare as interconnected with other ingroup members (Constantine et al., 2003), exposure to race-based discrimination may result in a sense of either individual or collective defeat. When attempting to mitigate the impact of racerelated stress, perhaps the mere belief that one is part of an in-group (e.g., belonging support) is insufficient unless the in-group is esteemed and valued by others. Similarly, efforts to commiserate with others about perceived racism (e.g., appraisal support) may be perceived as ineffective when matched with persistent racism. Though the latter forms of social support likely contribute to general well-being, they may fall short in lessening the impact of race-related stress on individual well-being. By bolstering individual and, potentially, collective morale via selfesteem support, these favorable comparisons allow one to regain a sense of self-efficacy and ultimately experience hope (in spite of racism). Recent findings indicated that African Americans most strongly endorsed self-esteem social support relative to the other dimensions of social support included in the ISEL (Payne et al., 2012). Thus, enhancement of resilience through self-esteem social support could be a primary mechanism of intervention for those distressed as a result of race-based discrimination.

The buffering effects of active means of social support is consistent with a number of psychological interventions, including but not limited to cognitive behavioral therapy (Beck,

1979) and dialectical behavior therapy (Linehan, 1987), that advance individual skills and that promote active forms of garnering social support. Skills-based interventions that promote active forms of social support and are tailored to seeking support from one's in-group should be employed in order to minimize the effect of race-related stress on hopelessness, ultimately aiding in the prevention of suicidality.

Limitations and Future Directions

The current study expands the available literature for race-related stress and psychological outcomes in African Americans. However, some limitations should be noted for interpreting results and informing future investigations. A robust literature exists as evidence of the enduring consequences of racial discrimination. Similar to other studies of perceived discrimination, however, one limitation of the current study is its cross-sectional design. This method presents specific challenges in drawing conclusions about causal relationships between race-related stress and hopelessness. Future studies that examine longitudinal effects of race-based discrimination or the lasting effects of exposure to racism (e.g., Prolonged Activation and Anticipatory Race-Related Stress Scale; Utsey et al., 2012) will allow for increased insight to acute and chronic health implications of race-related stress.

Another limitation of the current study is that the experience of race-related stress may be confounded, regionally, and also by inclusion of vicariously experienced racism. As the current study was conducted in the southeastern region of the U.S., replication efforts might be conducted in other regions of the country to further advance models of racism, hopelessness, and social support. It is also notable that the IRRS-B allows for expanded consideration of race-related stress beyond one's own experience (e.g., that of family, friends). Since the IRRS-B assesses race-related stress that arises when close others experience racism, future studies might

parse stress that emerges from one's first-hand experience of racism. Doing so would provide added specificity to understanding the consequences of race-related stressors. Similarly, examining specific *types* of racism (e.g., at the cultural, individual, and institutional level) would shed additional light on variations in the psychological consequences of perceived racism. Finally, the use of novel measures exclusively intended to detect modern forms of racism (e.g., the Racial Microaggressions Scale; Torres-Harding, Andrade, & Romero Diaz, 2012) may prove useful in quantifying contemporary experiences of race-related stress.

Though the current analysis was designed to focus solely on differing types of social support, other factors may buffer the discrimination-social support relationship. Psychological buffering may arise from spiritual beliefs or church-based networks (cf. Bierman, 2006; Butler-Barnes et al., 2016; Chatters, Taylor, Jackson, & Lincoln, 2008; Ellison, Musick, & Henderson, 2008). Further, individual-level predictors (i.e., appraisal processes and attributional style) may shape feelings of hopelessness when faced with race-related stress (Fernando, 1984; Harrell, 2000). Though such constructs have previously been examined among ethnic minority youth (Greening & Stoppelbein, 2002; Stein, Supple, Huq, Dunbar, & Prinstein, 2016) and in the broader context of discrimination (Eccleston & Major, 2006), thorough analyses of these constructs among African American adults have not been extensively examined.

Additionally, the small effect size for the interaction is a potential study limitation. It is clinically noteworthy, however, that the interactive effects of race-related stress and self-esteem social support increased the overall model's predictive power (Abelson, 1985). Of the study's measured variables, self-esteem social support was most strongly associated with hopelessness, though demonstrated modest scale reliability ($\alpha = 0.65$). Notwithstanding, the reliability estimate for the current sample was consistent with those observed in the design study and also in more

recent investigations (Cohen & Hoberman, 1983; Payne et al., 2012). Further examination of context for self-esteem social support is also needed. That is, does same (African American) ethnic comparison increase one's resilience to race-related stress or can self-esteem support emerge when one compares to European American or other ethnic groups? Some studies suggest that one's identification with the outgroup may serve to promote resilience against discrimination (Lee, 2005). Some insight to the role of same versus other group self-esteem support provides further insight to the mechanisms of resilience.

Conclusion

Using a risk-resilience framework, preliminary evidence of the buffering effect of social support on the relation between race-related stress and hopelessness was established in the current sample of African American adults. Additional research that further examines race-related stress, hopelessness, and alternative moderators and/or mediators via longitudinal methodology is warranted. Given evidence that self-esteem social support may have important implications as a potential resilience factor in the face of race-related stressors for African American adults, service providers may consider actively including such support for persons who present for acute psychological care. Much more research is needed to understand social and cognitive factors that buffer or magnify the deleterious effects of racism-related stress. Identifying such factors is crucial to understanding and improving mental health for African Americans and other marginalized groups.

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Table 1. Means, Standard Deviations, and Correlations Among Measured Variables (N = 236)

Variable	1	2	3	4	5	6	7	8	М	SD
1. BHS	-	.10	37**	45**	54**	.10	.01	07	4.81	4.56
2. RRS	-	-	.05	03	.07	.13*	.00	.07	36.80	21.41
3. Appraisal SS	-	-	-	.48**	.44**	03	01	.16*	6.83	3.01
4. Belonging SS	-	-	-	-	.46**	17**	09	.07	6.49	2.58
5. Self-esteem SS	-	-	-	-	-	11 [†]	.03	.14*	5.93	2.10
6. Age	-	-	-	-	-	-	04	.13*	35.89	12.41
7. Sex	-	-	-	-	-	-	-	.00		
8. Education	-	-	-	-	-	-	-	-	4.43	1.41

Note. BHS = Beck Hopelessness Scale. RRS = Race-related stress. SS = Social support. Sex was coded as 0 = male; 1 = female. Education was coded as $1 = \text{less than } 7^{\text{th}}$ grade; 2 = junior high school; 3 = some high school; 4 = high school graduate; 5 = some college or specialized training; 6 = college/university graduate; 7 = graduate/professional training. *p < .05. **p < .01. †p < .10.

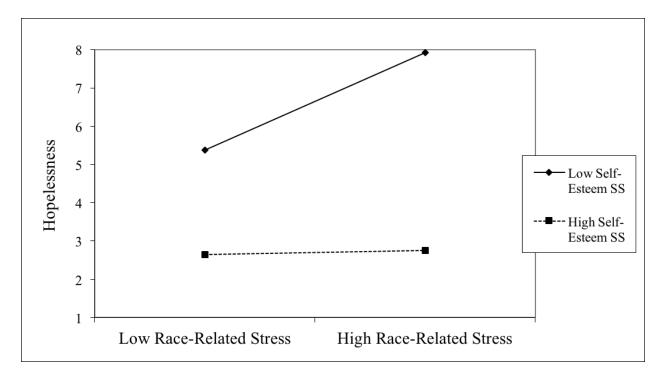
Table 2. Hierarchical Regression Analysis of Race-Related Stress and Perceived Social Support Predicting Self-Reported Ratings of Hopelessness

Model		В	SE b	ß	ΔR^2
Step	Variable				
Step 1					.020
	Education	0281	.178	009	
Step 2					.348**
	RRS	.031**	.011	.144**	
	Appraisal SS	341**	.098	225**	
	Belonging SS	094	.114	053	
	Self-esteem SS	897**	.135	413**	
Step 3					.372*
	RRS x Appraisal SS	003	.004	051	
	RRS x Belonging SS	.000	.005	.006	
	RRS x Self-esteem SS	013*	.006	133*	

Note. RRS = race-related stress. SS = social support. Sex was coded as 0 = male; 1 = female. Education was coded as $1 = \text{less than } 7^{\text{th}}$ grade; 2 = junior high school; 3 = some high school; 4 = high school graduate; 5 = some college or specialized training; 6 = college/university graduate; 7 = graduate/professional training.

^{*}p < .05. **p < .01.

Figure 1. Association of Race-Related Stress and Hopelessness at Low and High Levels of Self-Esteem Social Support.



Note. SS = social support.